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DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
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LEONARD K. PETERS
SECRETARY

FACT SHEET

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE FROM A LARGE MUNICIPAL SEPARATE STORM SEWER SYSTEM
INTO WATERS OF THE COMMONWEALTH

KPDES No.: KYS00002 **Permit Writer:** Abigail Rains **Date:** July 9, 2009
AI No.: 74551

1. **SYNOPSIS OF APPLICATION**

Name and Address of Applicant

Lexington-Fayette Urban County Government
200 East Main Street
Lexington, Kentucky 40507

Description of Applicant's Operation

The applicant operates a medium\large municipal separate storm sewer system through such controls as legal authority, source identification, discharge characterization, management program, assessment of controls, and fiscal analysis.

2. **PERMIT DURATION**

Five (5) years

3. **THE ADMINISTRATIVE RECORD**

The Administrative Record, including application, draft permit, fact sheet, public notice, LFUCG's Stormwater Quality Management Program dated January 1, 2008, comments received, and additional information is available for review at the Division of Water at 200 Fair Oaks Lane, Frankfort, Kentucky 40601.

4. **CONTACT**

Abigail Rains
KPDES Permit Writer
(502) 564-8158, extension 4891.

5. **ANTIDEGRADATION**

In the decision rendered by the U.S. Court of Appeals for the Sixth Circuit in *Kentucky Waterways Alliance, et al. v. Johnson, et al.*, the court remanded to EPA its approval of certain sections of Kentucky's Antidegradation Policy Implementation Methodology as codified in 401 KAR 10:030. In response to that remand, the Division of Water has worked with various parties, including parties to the *Kentucky Waterways Alliance, et al. v. Johnson, et al.* case, to determine an approach to satisfy antidegradation considerations under 40 CFR 131.12. From that effort the division identified four categories of discharges for which antidegradation procedures will be addressed in the permits themselves or for which antidegradation requirements are satisfied by alternative protective processes. These four categories of discharges include:

1. Discharges permitted under general permits;
2. Discharges occurring under the approval of a regional wastewater facility plan;
3. New or expanded discharges associated with a project identified in the Kentucky Transportation Cabinet's six-year road plan; and
4. An individual MS4 permit that incorporates provisions that the permit holder address antidegradation considerations or that the permit includes practices and procedures to prevent lowering of water quality from new or expanded discharges from the MS4.

Prior to the remand and reconsideration of 401 KAR 10:030, no antidegradation consideration had been made of new or expanded discharges from MS4s. The options for new or expanded discharges include: 1) for each new or expanded discharge the MS4 go through the antidegradation social-economic and alternatives analysis; or 2) that the MS4 permit itself incorporate provisions that the permit holder address antidegradation considerations; or 3) the permit includes practices and procedures to prevent lowering of water quality from new or expanded discharges from the MS4 The division maintains that for new or expanded discharges from MS4 systems covered under the LFUCG individual permit the applicable antidegradation requirements can be appropriately addressed by the requirements of this MS4 permit; consistent with the implementation procedures identified in the proposed 401 KAR 10:030 for this category of discharge satisfies applicable antidegradation requirements.

The Division of Water has determined that the LFUCG MS4 permit terms and conditions are sufficiently stringent to prevent any significant lowering of water quality in high quality and exceptional waters that may exist in Fayette County for new or expanded discharges from the MS4. The basis of this determination follows: (1) new construction activity (the source of most new or expanded discharges) are subject to antidegradation consideration under the stormwater construction general permit (KYR10) or antidegradation review under an individual stormwater construction and other applicable KPDES permits; and (2) MS4 discharges are subject to maximum extent practicable control standards, including such standards for discharges from new development or redevelopment on a post-construction basis, such as through ordinances implemented by LFUCG to limit peak discharges. The division is also giving consideration to the fact that any "new or expanded" discharges of stormwater from an MS4 are not truly "new or expanded" discharges (cf. process wastewater). The area to be served by the expanded MS4 already discharges stormwater to the receiving stream during rain events. Accordingly, new or expanded discharges of stormwater from an MS4 are inherently different from a discharge of process water under a KPDES permit.

In addition, because of the application of the MEP standard set forth in the KPDES permit and protections afforded by other permits, the division expects that any lowering of water quality will not result in water quality

being lowered to a level that would interfere with existing or designated uses in accordance with 401 KAR 10:030. This MS4 permit provides that any impacts may be addressed via alternatives employed by Minimum Control Measure #5 for post-construction stormwater runoff.

With the understanding of these considerations and the imposition of the aforementioned permit requirements DOW has clarified its expectation of LFUCG to meet antidegradation requirements as part of the permit. The goal of these requirements is to minimize degradation and to prevent any permanent lowering of water quality of waters of the Commonwealth categorized as “High Quality Waters.”

Purpose: This provision implements applicable antidegradation requirements. For background, water quality standards regulations are required to contain an antidegradation implementation policy. In addition, states are required to identify implementation methods that, at a minimum, provide a level of protection that is consistent with the federal antidegradation policy in 40 CFR 131.12. Waters designated as “High Quality” means a surface water categorized as high quality by the cabinet pursuant to 401 KAR 10:030, Section 1. The process for making a determination of whether water quality will be lowered in these waters to a level that would interfere with existing or designated uses is what is commonly known as “Tier 2 review.” The essence of a Tier 2 review is an analysis of alternatives to the discharge. 63 Fed. Reg. 36, 742, 36,784 (col. 1) (July 8, 1998). In no case may water quality be lowered to a level that would interfere with existing or designated uses (401 KAR 10:030).

Kentucky is adopting an approach herein that considers the controls within stormwater construction permits and the MS4 permit, namely MCM #5 and post-construction stormwater runoff. In addition, the Division of Water recognizes that so-called ‘=new and expanded discharges coming from an MS4 are not truly new and expanded discharges, but are existing discharges newly managed via the MS4 system.

The conclusion that compliance with the stormwater construction permit will meet the Tier 2 antidegradation requirements depends on several key aspects of these permits. First, implementation of erosion-prevention measures, sediment-controls measures, and other site-management practices selected in light of best industry practice, are equivalent to the best available control technology economically achievable (BAT), best conventional control technology (BCT), and best practicable control technology (BPT) limits for discharges from the type of activities covered by stormwater construction permits. All permittees are required to comply with the non-numeric effluent limits set out in these permits. Through compliance with these limits alone, DOW expects that the discharge of pollutants from stormwater construction sites will be reduced and/or eliminated so that permanent lowering of water quality will not occur. The DOW bases this conclusion, in part, on the standard by which permittees are required to select, design, install, and implement the control measures to be used to meet these non-numeric effluent limits. The stormwater construction permit requires the selection, design, installation, and implementation of erosion prevention measures, sediment controls measures, and other site management practices that are technologically available and economically practicable and achievable in light of best industry practice to reduce and/or eliminate pollutants in the stormwater discharge. Furthermore, once installed and implemented, the permittee is obligated to maintain control measures and to correct deficiencies where regular inspection determines that deficiencies exist.

Lastly, where DOW determines through its oversight activities and the oversight activities of the MS4 permittee (e.g., on-site inspection) that a discharger is not meeting its requirements under this permit, such a deficiency

will constitute a violation of the permit and will require follow-up corrective action. Additionally, where implementations of the technology-based requirements in this permit are not sufficient to protect the applicable water quality standards for the receiving water, the permittee shall be informed that an individual permit is necessary. Therefore, as new construction is adequately addressed by the applicable stormwater construction permit, much of the antidegradation concerns resulting from new development are satisfactorily addressed by the applicable stormwater construction permit.

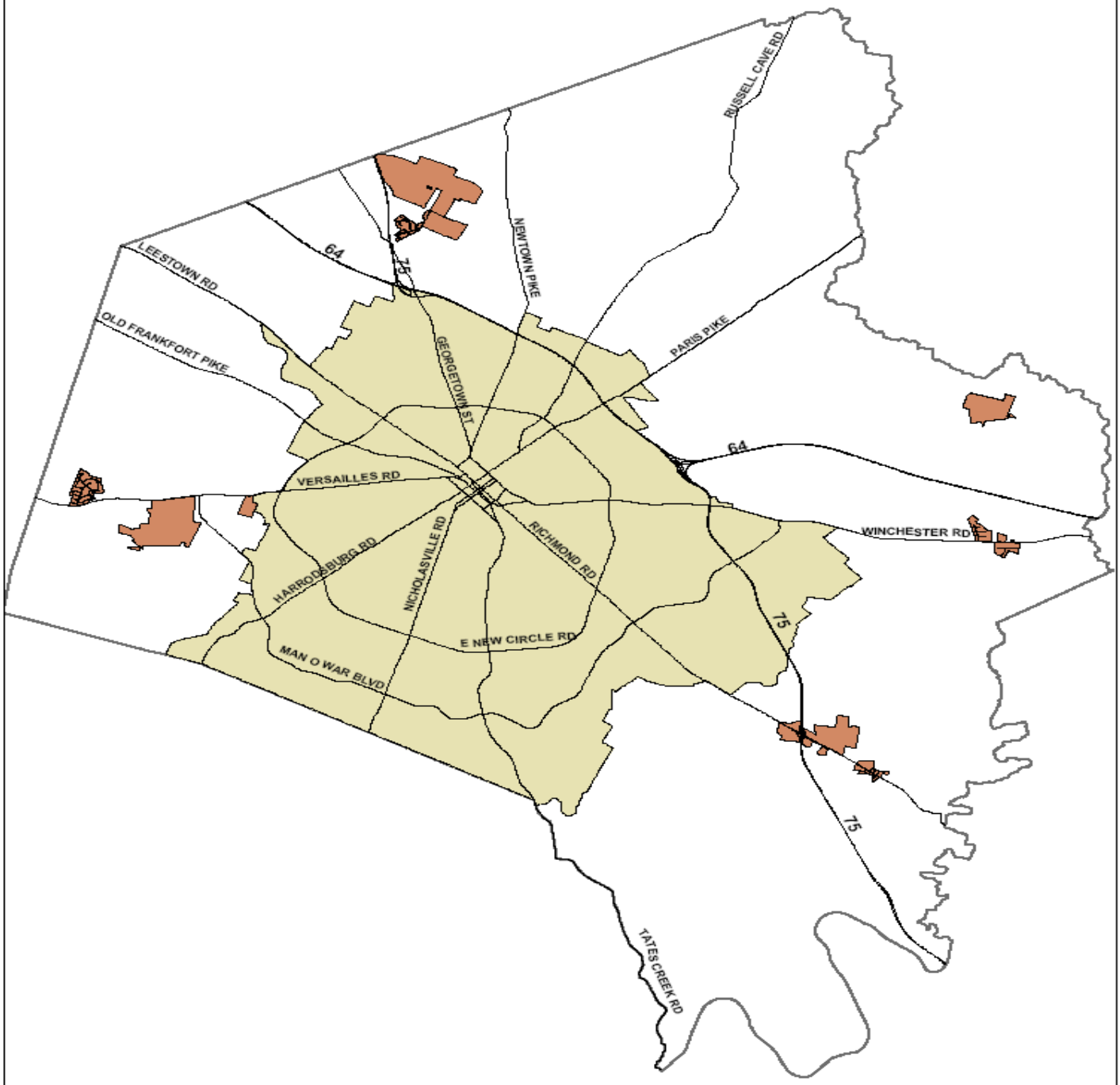
New or expanded discharges of stormwater from an MS4 are not truly “new” discharges because the area served by the expanded MS4 already discharges stormwater to the receiving stream during rain events (cf. other proposed new or expanded discharges of process wastewater). The so-called “new or expanded” discharges from the MS4 are in fact, not “new” as a discharge, albeit perhaps is different, and not at all “expanded” as local ordinance controls the volume of runoff to be limited to predevelopment levels. In addition, local ordinances control post-construction runoff from new and redeveloped areas as a means to address MCM #5 in the permit. MS4 discharges are also subject to maximum extent practicable (MEP) control standards, including such standards for discharges from new development or redevelopment on a post-construction basis, such as through ordinances implemented by LFUCG to limit peak discharges. Accordingly, new or expanded discharges of stormwater from an MS4 are inherently different from a discharge of process water under other KPDES permits. It is the conclusion of the division that the LFUCG MS4 permit is considered sufficiently stringent to prevent any significant lowering of water quality with respect to new or expanded discharges from the MS4 during wet weather events, consistent with the implementation procedures identified in the proposed 401 KAR 10:030 for this category of discharge satisfies applicable antidegradation requirements.

The DOW believes the conditions of 401 KAR 10:030 have been satisfied by this permit action. The process described above for new or expanded discharges of stormwater runoff associated with this MS4 is consistent with the requirements of 401 KAR 10:029, Section 1, 401 KAR 10:030, Section 1 and the ruling of the Sixth Circuit Court.

6. ATTACHMENT

Map – Urban Areas for Implementation of LFUCG’s Stormwater Quality Management Program

"Urban Areas" for Implementation of LFUCG's Stormwater Quality Management Program



KPDES

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

Permit No.: KYS000002
AI No.: 74551

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

Lexington-Fayette Urban County Government (LFUCG)
200 East Main Street
Lexington, Kentucky 40507

is authorized to discharge storm water runoff from a large municipal separate storm sewer system (MS4) to receiving waters of the Commonwealth in accordance with effluent limitations, monitoring requirements and other conditions set forth in PARTS I, II, III, and IV hereof. The permit consists of this cover sheet, a table of contents, and PART I 4 pages, PART II 29 pages, PART III 4 pages, PART IV 1 page.

This permit shall become effective on September 1, 2009.

This permit and the authorization to discharge shall expire at midnight, August 31, 2014.

E-Signed by Jory Becker
VERIFY authenticity with ApproveIt

July 9, 2009
Date Signed

Sandra L. Gruzesky, Director
Division of Water

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 200 Fair Oaks Lane, Frankfort, Kentucky 40601

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PART I. APPLICABILITY

A. PERMIT COVERAGE AREA

This permit applies to LFUCG's municipal separate storm sewer system (MS4) conveyances and outfalls to the waters of the Commonwealth throughout Fayette County, Kentucky due to LFUCG's status as a merged urban-county government. The following programs do not apply outside "Urban Areas," as defined in the SWQMP: Illicit Discharge Detection and Elimination (except as associated with the Industrial Facilities program), Pollution Prevention in Residential and Commercial Areas, and Pollution Prevention for Municipal Operations. LFUCG's MS4 does not include the University of KY's MS4 or the KY Transportation Cabinet's MS4. The following parties are subject to the limits and conditions of the permit.

Permittee: Lexington-Fayette Urban County Government

B. AUTHORIZED DISCHARGES

The permittee identified in Section A of this Part is authorized to discharge storm water runoff from its MS4 to waters of the Commonwealth in accordance with effluent limitations, monitoring requirements and other conditions set forth in this Section.

1. Limitations

The following discharges are not authorized by this permit:

a. Discharges of non-storm water, except where such discharges are in compliance with a separate KPDES permit (or the discharger has applied for such a permit) or where those discharges have been determined not to represent significant sources of pollution, consistent with state and federal regulations; and

b. Discharges of materials resulting from a spill, except emergency discharges required to prevent imminent threat to human health or to prevent severe property damage, provided reasonable and prudent measures have been taken to minimize the impact of the discharges.

2. Cross–Connection Between Sanitary Sewers and Storm Sewer/MS4 Prohibited

a. This permit shall not be construed to authorize the discharge of sanitary wastewater through cross connections or to authorize other illicit discharges through the Municipal Separate Storm Sewer System, except as provided in 401 KAR 5:065 Section 1(1)(b)(13).

3. Effluent Limitations

There are no numeric effluent limitations associated with this permit.

C. DEFINITIONS

Definitions contained in the Kentucky Administrative Regulations (KAR) and Federal NPDES rules apply where one is not specified below. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. "Active Construction Sites" means those sites within LFUCG's jurisdictional boundary (excluding Agricultural Activities) where there are construction activities that result in the disturbance of one (1) or more acres of total land and those sites that include a disturbance of less than one (1) acre of total land area that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) acre or more. Construction activities include clearing, grading, and excavating. A site shall be considered "active" until such time that the site is finally stabilized and temporary best management practices have been removed. Stabilized shall mean the following:
   - all soil-disturbing activities at the site have been completed
   - a uniform perennial vegetative cover with a density of 70% or more has been established for unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures such as riprap, gabions, or geotextiles have been employed
   - ditches, channels, ponds, etc. have been stabilized,

   as defined in LFUCG's Stormwater Quality Management Program, dated January 1, 2008.
2. "Agricultural Activities" are activities related to planting of crops or pasture associated with farming or the horse industry, excluding construction for buildings or structures associated with such activities, as defined in LFUCG's Stormwater Quality Management Program, dated January 1, 2008.
3. "Best Management Practices" or "BMPs" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control storm water runoff.
4. "CFR" means Code of Federal Regulations.
5. "Clean Water Act" or "CWA" means the Clean Water Act as subsequently amended (33 U.S.C. Section 1251 et seq.) otherwise known as the Federal Water Pollution Control Act.
6. "Director" means the Director of the Kentucky Division of Water, or an authorized representative of that position.
7. "Discharge", unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sewer System (MS4), subject to Section 402 of the CWA.
8. "EPSC" is an acronym for "erosion prevention and sediment control," a program for protection of receiving streams from Active Construction Site runoff the waters of the Commonwealth, as defined in LFUCG's Stormwater Quality Management Program, dated January 1, 2008.
9. "Grab sample" means an instantaneous sample collected from the flow at a sampling location, either in-stream or at an outfall.
10. "High-Risk Commercial Facilities" are commercial facilities that LFUCG determines have a reasonable potential to discharge pollutants of concern at significant levels to the MS4.

11. “Illicit connection” means any connection to LFUCG’s municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a KPDES permit; discharges resulting from fire fighting activities, or other de minimis activities allowable under the MS4 regulations, and other discharges referenced in 40 CFR 122.26(d)(2)(iv)(B)(1).
12. “Illicit discharge” means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a KPDES permit, other than the KPDES permit for discharges from the municipal separate storm sewer, and discharges resulting from fire fighting activities, or other de minimis activities allowable under the MS4 regulations, and other discharges referenced in 40 CFR 122.26 (d) (2) (iv) (B) (1).
13. “Industrial Facility” means any facility located within LFUCG’s jurisdictional boundary from which there is a “stormwater discharge associated with industrial activity” as defined in 401 KAR 5:002 Section 1 (292), excluding active Construction Sites. It also includes SARA Section 313 facilities referenced in 401 KAR 5:060 Section 12(3)(b)4.c. that have a reasonable potential to discharge pollutants of concern at significant levels to the MS4 from industrial activities, as defined in LFUCG’s Stormwater Quality Management Program, dated January 1, 2008.
14. “Industrial Land Use” means land utilized in connection with manufacturing, processing, or raw materials storage at facilities, as defined in LFUCG’s Stormwater Quality Management Program, dated January 1, 2008.
15. “KAR” is an acronym for “Kentucky Administrative Regulations.”
16. “KPDES” is an acronym for “Kentucky Pollutant Discharge Elimination System”
17. “KRS” is an acronym for “Kentucky Revised Statutes.”
18. “LFUCG” is an acronym for Lexington-Fayette Urban County Government.
19. “MEP”, or “Maximum Extent Practicable,” is the control standard for discharges from the Municipal Separate Storm Sewer Systems established by CWA §402(p), as defined by LFUCG’s Stormwater Quality Management Program, dated January 1, 2008.
20. “MS4” is an acronym for “municipal separate storm sewer system”.
    “Municipal Separate Storm Sewer System” means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains): owned or operated by LFUCG that discharges to Waters of the Commonwealth:

    a. designed or used for collecting or conveying storm water;
    b. which is not a combined sewer; and
    c. which is not part of a Publicly Owned Treatment Works (POTW) as defined at KRS 224.01-010.

21. “Municipal Waste Facilities” are LFUCG Facilities that actively treat, store, or dispose of sewage or refuse. At the time of permit issuance, this includes the Haley Pike Landfill, the Material Recovery Facility on Manchester Street, the Town Branch WWTP, and the West Hickman WWTP, as defined in LFUCG’s Stormwater Quality Management Program, dated January 1, 2008.
22. “NPDES” is an acronym for “National Pollutant Discharge Elimination System,” the effluent permitting program for point source discharges that is administered by the United States Environmental Protection Agency.
23. “Permittee” means the primary applicant for a KPDES permit, in this case the Lexington-Fayette Urban County Government, who is only responsible for permit conditions relating to the discharges that it owns or operates.

24. "Outfall" means a “point source” at the point where a municipal separate storm sewer discharges to Waters of the Commonwealth, but does not include open conveyances connecting two (2) municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other Waters of the Commonwealth and are used to convey Waters of the Commonwealth.
25. “Point Source” means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation from which pollutants are or may be discharged. The term does not include return flows from irrigated agriculture or agricultural storm water runoff.
26. “Storm Sewer,” unless otherwise indicated, refers to a municipal separate storm sewer.
27. “Storm Water” means storm water runoff, snowmelt runoff, and surface runoff drainage.
28. “Storm Water Discharge Associated with Industrial Activity” means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing, or raw material storage areas at an industrial plant, as defined in 401 KAR 5:002 Section 1 (292).
29. “Stormwater Manual” refers to the current edition of the LFUCG’s Stormwater Manual that contains the stormwater quality and quality design requirements for new infrastructure in Fayette County.
30. “Storm Water Quality Management Program,” or "SWQMP," refers to a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system. The SWQMP is considered a single document, even though it actually consists of separate programs (e.g. “chapters”) and references various Appendices.
31. “TMDL” is an acronym for “Total Maximum Daily Load,” a federally mandated program for the protection of streams and lakes by allocation of pollutant waste loads to significant sources of the pollutant in a watershed or stream reach.
32. “Urban Areas” are areas within the LFUCG Urban Service Boundary and the following rural residential areas and concentrated commercial areas outside the Urban Service Boundary: Westmorland Road area, Athens Community, Eastpoint Drive area, Riviera Road area, Donelwal Drive area, Wellesley Heights Way area, Avon/Bluegrass Station Industrial Park area, Blue Sky Industrial Park area, Horse Park/Spindletop area, and Bluegrass Airport. The Urban Areas are delineated on the enclosed map. The boundary of the Urban Areas may change as more areas become urbanized, as defined in LFUCG’s Stormwater Quality Management Program, dated January 1, 2008.
33. "Water" or "Waters of the Commonwealth" means and includes any and all rivers, streams, creeks, lakes, ponds, impounding reservoirs, springs, wells, marshes, and all other bodies of surface or underground water, natural or artificial, situated wholly or partly within or bordering upon the Commonwealth or within its jurisdiction.
33. “Wet Weather Conveyances" are man made or natural watercourses, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality and whose channels are above the groundwater table and which do not support fish and aquatic life and are not suitable for drinking water supplies.

PART II. STORM WATER QUALITY MANAGEMENT PROGRAM

The permittee is required to develop, implement and enforce a SWQMP which shall include controls intended to reduce the discharge of pollutants from its MS4 conveyances consistent with Section 402(p) of the Clean Water Act. These requirements shall be met using controls which may consist of a combination of best management practices (BMPs), control techniques and systems, design and engineering methods, public participation and education, and other appropriate provisions designed to limit the discharge of pollutants from the MS4 conveyances and which are environmentally beneficial and technically and economically feasible. The tables and requirements included in this part of the permit represent MEP.

A. LEGAL AUTHORITY

The permittee shall ensure legal authority to control discharges to and from those portions of the MS4 over which it has jurisdiction. This legal authority may be a combination of statute, ordinance, permit, contract, order, or inter-jurisdictional agreements between permittees with adequate existing legal authority to accomplish items 1-5 below:

1. To control the contribution of pollutants to the MS4 by storm water discharges associated with Industrial Activity and the quality of storm water discharged from sites of Industrial Activity;

2. To prohibit illicit discharges to the MS4;

3. To control the discharge of spills and the dumping or disposal of materials other than storm water (e.g. industrial and commercial wastes, trash, used motor vehicle fluids, leaf litter, grass clippings, animal wastes, etc.) into the MS4;

4. To require compliance with conditions in ordinances, permits, contracts or orders; and,

5. To carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.

B. STORM WATER QUALITY MANAGEMENT PROGRAM

The storm water quality management program is an integral part of the overall watershed management plan, per KAR 5:060, Section 12(3)(b)4 and 40 CFR 122.26(d)(2)(IV), which includes non-point sources, and wastewater treatment point sources. A comprehensive wet weather plan utilizing an integrated approach for prioritization and implementation is necessary to adequately address the watershed needs. Implementation of a program to effectively reduce pollutants (including floatables) in discharges from municipal separate storm sewers must include program elements that address public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, post construction storm water management, industrial monitoring and control, and good housekeeping and pollution prevention in municipal operations.

1. Public Education and Outreach on Storm Water Impacts

Implement a public education program and conduct public outreach activities in the community that collaborate on impacts from storm water discharges to water bodies and the steps that the public can take to reduce pollutants in storm water runoff, per applicable state and federal requirements.

Compliance with these terms is achieved by implementing the program elements, as shown in Table 1 (Public Education and Outreach Requirements) in Section E of this Part, except where inconsistent with other provisions of this permit.

2. Public Involvement/Participation

At a minimum, comply with state and local public notice requirements when implementing a public involvement/participation program. Activities may include representation on local storm water management work groups, public hearings, education volunteers, assisting with program coordination and monitoring efforts, per applicable state and federal requirements

Compliance with these terms is achieved by implementing the program elements, as shown in Table 2 (Public Involvement and Participation Requirements) in Section E of this Part, except where inconsistent with other provisions of this permit.

3. Illicit Discharge Detection and Elimination

a. Develop, implement, and enforce a program to detect and eliminate illicit discharges, per applicable state and federal requirements;

b. Develop, if not already completed, a storm sewer system map, showing the location of all known major outfalls, as defined herein, and the names and location of all waters of the Commonwealth that receive discharges from those outfalls;

c. To the extent allowable under state or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges into the separate storm sewer system, define allowable non-storm water discharges, and implement appropriate enforcement procedures and actions;

d. Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the MS4 system;

e. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and

f. If in the course of implementing the SWQMP it is demonstrated that at any location sanitary sewer lines exfiltrate and such exfiltration migrates to the Municipal Separate Storm Sewer System, the permittee shall evaluate, prepare and implement a response plan to correct the sanitary sewer exfiltration problem.

Compliance with these terms is achieved by implementing the program elements, as shown in Table 3 (Illicit Discharge Detection and Elimination Requirements) in Section E of this Part, except where inconsistent with other provisions of this permit.

4. Construction Site Storm Water Runoff Control

a. Develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from Active Construction Sites.

b. The program must include the development and implementation of, at a minimum:
   (i) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, or local law;
   (ii) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices (BMP);
   (iii) Procedures for site plan review which incorporate consideration of potential water quality impacts;
   (iv) Procedures for receipt and consideration of information submitted by the public; and
   (v) Procedures for site inspection and enforcement.

Compliance with these terms is achieved by implementing the program elements, as shown in Table 4 (Construction Site Storm Water Runoff Control Requirements) in Section E of this Part, except where inconsistent with other provisions of this permit.

5. Post-Construction Storm Water Management in New Development and Redevelopment

a. Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts;

b. Develop and implement strategies, which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for the community;

c. Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under state or local law; and

d. Ensure adequate long-term operation and maintenance of BMPs.

Compliance with these terms is achieved by implementing the program elements, as shown in Table 5 (Pollution Prevention in Residential and Commercial Areas) in Section E of this Part, except where inconsistent with other provisions of this permit.

6. Pollution Prevention/Good Housekeeping for Municipal Operations

Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, the state or other organizations, the program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

Maintenance of public streets, roads and highways, including pollutants discharged as a result of deicing application and storage practices must implement alternative measures that might benefit water quality from runoff from roadway and salt bin storage locations and will not affect public safety.

Compliance with these terms is achieved by implementing the program elements, as shown in Table 6 (Pollution Prevention in Municipal Operations) in Section E of this Part, except where inconsistent with other provisions of this permit.

7. Monitor and Control Pollutants in Storm Water Discharges from Landfills, Hazardous Waste Treatment Storage and Disposal Facilities (TSDF), and Industrial Facilities

Develop and implement a program to monitor and control pollutants in storm water discharges to municipal systems from municipal waste landfills, hazardous waste treatment, disposal and recovery facilities, and Industrial Facilities and High Risk Commercial Facilities. The program shall:

a. Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges;

b. Describe a monitoring program for stormwater discharges associated with the industrial discharges identified above, to be implemented during the term of the permit.

Compliance with these terms is achieved by implementing the program elements, as shown in Table 7 (Industrial Facility and Municipal Waste Facility Stormwater Pollution Prevention Programs) in Section E of this Part, except where inconsistent with other provisions of this permit.

C. IMPLEMENTATION PLAN REVIEW AND MODIFICATION

1. The permittee shall perform an annual review of the current SWQMP in conjunction with preparation of the Annual Report.

2. The permittee may modify the SWQMP during the life of the permit in accordance with the following procedures:

a. Modifications that add but neither subtract nor replace, components, controls, or requirements to the approved SWQMP may be made by the permittee at any time. A description of the modification shall be included in the subsequent Annual Report;

b. Modifications that replace an ineffective or infeasible BMP, which is specifically identified in the SWQMP along with an alternate BMP, may be made by the permittee at any time. A description of the replacement BMP shall be included in the subsequent Annual Report along with the following information:
(i) An analysis of why the former BMP was ineffective or infeasible (including cost-prohibitive);
(ii) Expectations on the effectiveness of the replacement BMP; and
(iii) An analysis of why the replacement BMP is expected to achieve the goals of the BMP which was replaced;

c. Modifications to adjust the schedule for maintenance activities or the frequency of inspections or monitoring identified in the SWQMP may be made by the permittee on an annual basis. The permittee must include in the subsequent Annual Report a description of the adjustment to the schedule along with the following information:
   (i) An analysis of why the former schedule was ineffective or infeasible; and
   (ii) Expectations on the effectiveness of the replacement schedule;

d. Modifications included in the Annual Report shall be signed by the permittee affected by that modification, and shall include a certification that the permittee were given an opportunity to comment on proposed changes; and

e. The permittee shall implement the SWQMP on all new areas added to their portion of the municipal separate storm sewer system (or for which they become responsible for implementation of storm water quality controls) as expeditiously as practicable. Implementation of the program in any new area shall consider the plans in the SWQMP of the previous MS4 ownership;

3. Permittee may proceed with any uncompleted programs from the previous permit cycle to ensure the continuation of all positive activities towards improvement of water quality.

4. The content and provisions of the SWQMP, as discussed in Part II, are not considered permit conditions. It is an implementation plan to be utilized as a tool by the permittee to ensure compliance with program elements outlined in this permit.

D. TOTAL MAXIMUM DAILY LOADS AND IMPAIRED WATERS

1. Total Maximum Daily Loads (TMDLS).

If a TMDL is approved for any impaired waterbody into which discharges from the MS4 cause or contribute to water quality impairment(s), KDOW will review the TMDL and applicable wasteload allocation(s) to determine whether the TMDL includes requirements for control of stormwater discharges. If current discharges from the MS4 are not meeting TMDL allocations, KDOW will notify the permittee of that finding and may require that the SWQMP identified in Part II be modified, in accordance with Part III.F. of this permit relating to Reopening the Permit for major modifications, to include any applicable and appropriate BMPs to implement the TMDL within a reasonable timeframe.

2. Evaluation of TMDL Allocations.

After establishment of an approved TMDL for a pollutant of concern in the permittee's stormwater discharges during this permit term, the permittee shall identify the impaired stream segment(s) and/or tributaries to those impaired stream segments and the location of all known MS4 major outfalls discharging a pollutant of concern under the TMDL to those segments or occurring within those segments. The permittee shall evaluate the discharge load associated with the identified MS4 major outfalls for the pollutant, including monitoring, reporting and/or otherwise, at issue. Prior to any reopening of this permit under paragraph D.1. above, the permittee shall consider and propose applicable and appropriate Best Management Practices for its MS4 to reach the wasteload goal of the TMDL, and a schedule of implementation for those Best Management Practices. Nothing herein shall prevent the permittee from pursuing a variance or exceptions based upon a use attainability analysis or the criteria for exceptions set forth in 401 KAR 10:031. Applicable limitations, conditions and requirements contained in the TMDL are also to be addressed in the SWQMP.

3. Impaired Water Bodies.

For impaired waters that lack a TMDL, the permittee shall evaluate its Best Management Practices in the SWQMP with respect to any new or expanded MS4 discharges for pollutants of concern that substantially change the discharge to impaired waterbodies listed on the Clean Water Act Section 303(d) list in the Division of Water publication entitled, "2008 Integrated Report to Congress on the Condition of Water Resources in Kentucky Volume II. 303(d) List of Surface Waters" to assess their effectiveness in minimizing pollution to such impaired water bodies. The evaluation of BMPs may be conducted on a watershed basis or on a point source basis for newly proposed or expanded discharges. For those waters designated as impaired on the 303(d) list that the MS4 discharges into, the permittee shall monitor the impaired waters for those pollutants attributed to stormwater sources for at least 3 storm events during the permit term. Based upon its evaluation, the permittee shall modify its SWQMP as necessary and appropriate to improve the effectiveness of the BMPs.

E. PERMIT COMPLIANCE

Compliance with the requirements of Part II, Section B, Subsections 1–7, is as defined in Tables 1–9, respectively, of this section. The information in Tables 1-9 provides the identification the program elements, a description of the program elements, the frequency or timetable for completion.

F. FISCAL REQUIREMENTS

Funding shall be established and maintained to ensure the accomplishment of the activities required by this permit.

TABLE 1. PUBLIC EDUCATION AND OUTREACH REQUIREMENTS (PE)		
The objective is to increase public awareness of water quality issues associated with discharges to the municipal separate storm sewer system (MS4) and to promote stewardship of the waters of the Commonwealth within the scope of this permit		
PE 1 General Public & Stakeholder Education Program		
The permittee shall maintain an education program to foster stewardship of the water resources of Fayette County due to discharges from the MS4. This program shall be evaluated each year for measures of success to determine effectiveness of the plan.		
Element Task	**Frequency**	**Activity Required**
General	Within one year of permit issuance, and revise annually, if needed.	The permittee shall have a functional website that will have sections devoted to the homeowner, businesses, the construction industry, and public institutions to educate these audiences on the methods available to prevent pollution to the MS4.
	4 press releases in Year One, 2 per year for duration of permit	The permittee shall develop press releases to newspapers and television/radio stations about the Stormwater Quality Program and the website.
	Within one year of permit issuance, and updated as needed	The permittee will create an email list for people interested in knowing more about the Stormwater Quality Program, and to inform the public about changes to the Stormwater Quality Management Program.
Homeowners	Evaluate Annually	The permittee shall make available educational materials, public service announcements, and/or multimedia presentations for homeowners and property owners related to point and non-point source pollution, household hazardous waste, and proper lawn care practices.
Businesses (Commercial & Industrial)	Evaluate Annually	The permittee shall make available educational materials and/or multimedia presentations for area businesses related to point and non-point source pollution and stormwater pollution prevention measures for grounds maintenance and operational procedures.
Construction Industry	Evaluate Annually	The permittee shall make available educational materials and/or multimedia presentations for the construction industry related to point and non-point source pollution and stormwater pollution prevention measures for operational procedures and erosion and sediment controls.
Public Institutions: Education & Management	Evaluate Annually	The permittee shall make available educational materials and/or multimedia presentations for public institutions related to point and non-point source pollution and stormwater pollution prevention for erosion and sediment controls, grounds maintenance, capital construction projects, and institutional educational and operational programming.

PE 2 Community Meetings		
The permittee shall conduct, facilitate, and participate in meetings held throughout the community to promote stewardship of the water resources of Fayette County associated with discharges from the MS4.		
Element Task	**Frequency**	**Activity Required**
Public Meetings	4 per year	The permittee shall conduct, facilitate, and/or participate in meetings of the public, boards of directors for community civic groups, governing councils, neighborhoods, public task forces, planning and zoning commissions, and/or civic groups.
PE 3 Stormwater Pollution Prevention & Watershed Management Training		
The permittee shall conduct, facilitate, and participate in training activities that promote stewardship of the water resources of Fayette County through presentations on the sources, impacts and solutions of stormwater pollution associated with discharges from the MS4. Training activities will be a part of other programs such as illicit discharge detection and elimination and construction activities.		
Element Task	**Frequency**	**Activity Required**
Classroom Training	As requested and scheduled	The permittee shall facilitate and participate in training activities for K-12 schools and universities.
Employee Training	Annually	The permittee shall conduct training classes for employees on the sources, impacts, and solutions of stormwater pollution.
Community Training Opportunities	As requested and scheduled	The permittee shall participate in community training activities to promote water resource stewardship and the reduction of stormwater pollution. Potential opportunities would include Kentucky River Watershed Watch, The Master Gardner Program, etc.
Elected Officials & Development Communities	Annually	The permittee shall conduct land use and watershed management training activities on the sources, impacts, and potential solutions of stormwater pollution for the Urban County Council and the Planning Commission.
Business Community (Commercial & Industrial)	Annually	The permittee shall conduct, facilitate, and participate in technical training activities for businesses and industries. Training to provide assistance to construction industry regarding construction site runoff control and commercial businesses regarding pollution prevention measures for commercial and industrial sites.

TABLE 2. PUBLIC INVOLVEMENT AND PARTICIPATION REQUIREMENTS (PI)		
The objective is to increase public involvement in the management of the stormwater pollution prevention programs of Fayette County associated with discharges to the municipal separate storm sewer system (MS4).		
PI 1 Central Reporting of Pollution or Hazards		
The permittee shall conduct, facilitate, and participate in meetings held throughout the community to promote stewardship of the water resources of Fayette County associated with discharges from the MS4.		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall continue operation of LEXCALL (via phone and website) to include the following: reporting of spills, reporting of illegal dumping/activity, reporting of complaints, and signing up for volunteer activities.
	Annually	The permittee shall evaluate the LEXCALL records to make sure that all water quality and stormwater related calls are properly handled, including tracked and reported. The permittee will ensure that calls are being forwarded to the appropriate Divisions for follow-up and resolution; this will involve coordination between LEXCALL staff and Department of Public Works and Development and/or Department of Environmental Quality staff.
	Annually	The permittee will train the LEXCALL staff during regular staff training on the importance of water quality issues and codes for stormwater related issues will be stressed.
		The permittee shall publish the LEXCALL phone number and website address on stormwater educational materials.
PI 2 Support Civic Groups Involved in Watershed Management and Stormwater Pollution Prevention		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall provide opportunities for community groups and organizations whose goals are water resource protection, watershed management and stormwater pollution prevention, to review program activities and developments.
PI - 3 Facilitate Volunteer Service Opportunities for the Public		
Element Task	**Frequency**	**Activity Required**
	4 per year	The permittee shall facilitate opportunities for the public to volunteer time and resources in community activities to reduce and prevent stormwater pollution. Activities may include clean-ups, volunteer sampling and planting of native vegetation and will be promoted via press releases, local cable access Channel 3, and website.

TABLE 2. PUBLIC INVOLVEMENT AND PARTICIPATION REQUIREMENTS (PI)		
PI 4 Storm Drain Marking Program		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall facilitate volunteer activities that educate the public on stormwater management and improper disposal of wastes into the MS4.
	Mark 100 inlet structures per year	The permittee shall continue "Operation Upstream" to label storm drain inlet structures.
	Within 6 months of permit issuance	The permittee shall finalize storm drain marking protocol for medallion placement and stencil locations that can be provided to volunteers, include the process for prioritizing inlet structures to maximize pollutant reduction.
	Within 12 months of permit issuance	The permittee shall create a map showing locations of all currently marked drains and those to be marked and post on the website.
PI 5 Public Notification of Major Program Changes		
Element Task	**Frequency**	**Activity Required**
	Finalize notification system within 12 months of permit issuance	The permittee shall develop a system to notify the public and affected stakeholders of any proposed major program changes that will significantly impact stormwater runoff quality, negatively or positively. The public shall be given the opportunity to informally comment on proposed changes and these comments will be summarized and made available on the website.
PI 6 Stakeholder Advisory Committee		
Element Task	**Frequency**	**Activity Required**
	Within 12 months of permit issuance	The permittee will create a Stakeholder Advisory Committee and define the mission of the Committee and determine its standing and structure within the LFUCG. The permittee shall publicize the creation of the Committee via press releases and announcements on Cable Access Channel 3.

TABLE 3. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)		
The objective is to detect and prevent illicit connections and improper disposal of wastes into the MS4 by determining the types and sources of illicit discharges entering the system by establishing legal, technical, and educational means needed to prevent these discharges into the waters of the Commonwealth within the scope of this permit.		
IDDE 1 Legal Prohibition/Control Authority		
The permittee shall effectively establish by ordinance, regulation, permit or series of contracts which authorizes or enables the permittee to control, prevent, reduce, and eliminate pollutants from discharges of stormwater to the MS4. This program applies only to the Urban Service Area and the "Urban Area" for Implementation of LFUCG's Stormwater Quality Management Plan that is notated in the map attached to the permit.		
Element Task	**Frequency**	**Activity Required**
Illicit Discharges	On going	The permittee shall effectively prohibit, through ordinance, operational procedures, or other regulatory means, non-exempt, non-stormwater discharges into the MS4.
Improper Disposals	On going	The permittee shall control through ordinance, operational procedures, or other regulatory means the discharge to the MS4 of spills, dumping or disposal of materials other than stormwater.
IDDE 2 Inventory and Inspection		
The permittee shall carry out inventorying, inspections and surveillance to determine compliance and noncompliance with the prohibition on illicit discharges to the MS4.		
Element Task	**Frequency**	**Activity Required**
Infrastructure Inventory	Complete by January 31, 2010	The permittee shall review and update the current major outfall mapping and inventory, showing known major outfalls.
	Within 12 months of permit issuance	The permittee shall develop procedures for adding new Major Outfalls or for updating the inventory.
	Within 18 months of permit issuance	The permittee shall conduct desktop screening of storm sewersheds to prioritize likely areas of concern.
Inspection	Once per permit cycle	Beginning with the high priority watersheds, the permittee shall inspect once per permit cycle all drainage systems in the permit coverage area for the IDDE Program for evidence of illicit connections or improper disposal of wastes.
	Within 12 months of permit issuance	The permittee shall complete and implement procedures for conducting inspections and investigations when monitoring data, reported incidents, or other information indicate the likely existence of an illicit discharge.

TABLE 3. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)		
IDDE 3 Monitoring		
The permittee shall maintain water monitoring programs, procedures, and/or policies, including schedules, to detect illicit discharges and improper disposals to the MS4. This program will consist of water quality sampling at stormwater outfalls and representative field screening locations including in-stream sites.		
Element Task	**Frequency**	**Activity Required**
Outfall Screening	Commencing in calendar year 2009	The permittee shall conduct dry weather screening at no less than 125 locations every year, which may include major outfalls and other screening points selected by LFUCG.
Major Outfall Screening-Dry Weather Screening	Commencing in calendar year 2009	The permittee shall conduct dry weather screening of identified major outfalls once every two years.
Major Outfall Screening-Wet Weather Screening	As needed	The permittee shall conduct wet weather screening of major outfalls where appropriate based on results from in-stream water quality monitoring program.
Database	Within 4 months of permit issuance	The permittee shall develop a database to track the IDDE program and to compile all sampling field data and laboratory results.
IDDE 4 Investigation		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall maintain programs, procedures, and/or policies to investigate the MS4 when field screening information, citizen complaints/reports or employee reports indicate an illicit discharge or improper disposal of waste into the MS4.
IDDE 5 Evaluation		
Element Task	**Frequency**	**Activity Required**
	Within one year of permit issuance	The permittee shall develop and implement a protocol for elimination of confirmed illicit connections.
	Evaluate once every two years	The permittee shall evaluate sampling results to determine if changes to the SWQMP are necessary.

TABLE 3. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)		
IDDE 6 Enforcement of Controls		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall require compliance with conditions in ordinances, permits, contracts and orders that prevent illicit discharges, spills, dumping and disposal of materials other than stormwater to the MS4. The permittee shall maintain enforcement programs, procedures, and/or policies to respond to the occurrence or detection of an illicit connection or improper waste disposal in accordance with the ordinances, operational procedures, or other regulatory means that have been established for the prohibition of such incidents
	Within one year of permit issuance	The permittee shall review, improve, and update, as necessary, the enforcement procedures and recommend changes where appropriate.
IDDE 7 Response to Spills		
Element Task	**Frequency**	**Activity Required**
	Finalize and implement within one year of permit issuance	The permittee shall identify current spill response and containment policies, update as necessary; review and update procedures for reporting spills to the applicable local and state agencies and implement the updated spill response and containment program.
IDDE 8 Prevention and Control Plans		
Element Task	**Frequency**	**Activity Required**
	Within 12 months of permit issuance	The permittee shall identify industries, businesses, and institutions that should have Stormwater Pollution Prevention Plans (SWPPPs).
	Within 12 months of permit issuance	The permittee shall identify employees who can provide training on pollution prevention and control plans (SWPPPs).
IDDE 9 Prevention and Control Plans		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall promote, publicize, and facilitate public reporting of the presence of illicit discharges and improper disposals and the associated water quality impacts. The permittee shall provide educational materials, public service announcements, and/or multimedia presentations regarding illicit connections and improper waste disposal into the MS4.

TABLE 3. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)		
IDDE 10 Training		
Element Task	**Frequency**	**Activity Required**
	One training session per year for the business community	The permittee shall offer training to the public and businesses regarding the prevention, control, and mitigation of illicit discharges.
	Commencing in calendar year 2009, conduct one training session per year	The permittee shall conduct, facilitate, and participate in training activities to be conducted annually for appropriate LFUCG employees.
	Complete survey forms within 12 months of permit issuance	The permittee shall develop audience surveys to measure attendance and evaluate the extent to which the target audience is being reached and ways to expand the audience reached.
IDDE 11 Controls for Sanitary Sewer		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall maintain programs, procedures, and/or policies to detect, investigate and eliminate discharges of sanitary sewage from the municipal sanitary sewer system into the MS4.

TABLE 4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL REQUIREMENTS (CS)		
The objective is to develop, implement, and enforce programs to minimize pollutants in stormwater runoff from construction sites to the municipal separate storm sewer system (MS4).		
CS 1 Legal Prohibition/Control Authority		
The permittee shall effectively establish by ordinance, regulation, permit or series of contracts the authority to control pollutants in discharges of stormwater runoff from construction sites addressed in 40 CFR 122.26(d)(2)(A) to the MS4. [Furthermore, refer to Table 3. Illicit Discharge Detection and Elimination for the control authority and prohibition of non-exempt, non-stormwater discharges; spills; dumping; or disposal of materials other than stormwater into the MS4.]		
CS 2 Water Quality Considerations in Site Planning		
The permittee shall maintain programs, procedures, and/or policies for construction site planning which incorporate considerations of potential water quality and habitat impacts.		
Element Task	**Frequency**	**Activity Required**
Review Procedures	Within 4 months of permit issuance	The permittee shall develop and commence implementation of procedures for summary review of construction site erosion control plans to assess whether plans reasonably include measures that address potential water quality impacts from construction prior to authorization of land disturbance.

TABLE 4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL REQUIREMENTS (CS)		
CS 3 Non-structural & Structural BMPS		
The permittee shall maintain programs, procedures, and/or policies for non-structural and structural control best management practices to reduce pollutants in stormwater runoff from construction sites.		
Element Task	**Frequency**	**Activity Required**
Non-structural Controls	On going	The permittee shall maintain programs, procedures, and/or policies for the site review and plan review process that address erosion and sediment controls and other stormwater pollution prevention measures.
Structural Controls	On going	The permittee shall maintain programs, procedures, and/or policies to require the installation and maintenance of effective stormwater pollution prevention best management practices for construction sites discharging to the MS4.
CS 4 Site Inspections and Enforcement of Controls		
The permittee shall maintain programs, procedures, and/or policies for site inspections and enforcement of stormwater pollution prevention controls. The permittee shall require compliance with conditions in ordinances, permits, contracts and orders that control stormwater discharge from construction sites to the MS4.		
Element Task	**Frequency**	**Activity Required**
Site Inspections	On going	The permittee shall conduct monthly inspections of a substantial majority of active construction sites with reasonable potential to discharge to the MS4.
	Within 4 months of permit issuance	The permittee shall review construction site inspection and enforcement procedures and the existing inspection checklist and develop and commence implementation of revised procedures and checklist.
Targeted Inspections	Within 6 months of permit issuance	The permittee shall develop protocols for targeting active construction sites for additional inspections based on, but not limited to, nature of construction site, complaints, proximity to water bodies, the uses of the receiving water body, topography, characteristics of soils on site, types of chemicals and processes being used during construction.
Data Tracking	Within 4 months of permit issuance	The permittee shall develop a database to track active construction sites, inspections, and enforcement actions.

TABLE 4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL REQUIREMENTS (CS)		
CS 5 Education		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall provide educational materials, public service announcements, and/or multimedia presentations regarding stormwater pollution prevention for construction sites through the effective use of best management practices. The permittee shall provide educational materials that discuss the associated water quality and aquatic community impacts from poor construction practices.
	Within one year of permit issuance	The permittee shall have a functional stormwater website that puts links to educational materials and multimedia presentations about construction site runoff control and best management practices.
CS 6 Training		
Element Task	**Frequency**	**Activity Required**
	Complete within 12 months of permit issuance	The permittee shall identify staff and third party groups who are capable of providing training on construction site runoff control.
Construction Community Training	Begin in Year 2 and conduct one training session per year	The permittee shall conduct training sessions for the construction community, including site developers, designers, and contractors' inspectors in land management and construction categories that impact water quality.
LFUCG Employee Training	Begin in Year 1 and conduct one training session per year	The permittee shall conduct training sessions for the LFUCG employees who carry out LFUCG's construction site runoff program and who are involved with construction site inspections and enforcement.
Evaluation	Complete survey forms within 12 months of permit issuance	The permittee shall develop audience surveys to measure attendance and evaluate the extent to which the target audience is being reached.

TABLE 5. POLLUTION PREVENTION RESIDENTIAL AND COMMERICAL AREAS (PPRC)		
The objective is to develop, implement, and enforce programs and procedures to minimize pollutants from stormwater runoff from residential and commercial land uses to the municipal separate storm sewer system (MS4).		
PPRC 1 Legal Prohibition/Control Authority		
Refer to Table 3. Illicit Discharge Detection and Elimination for the control authority and prohibition of the permittee of non-exempt, non-stormwater discharges; spills; dumping; or disposal of materials other than stormwater into the MS4. This program applies only to the Urban Service Area and the "Urban Area" for Implementation of LFUCG's Stormwater Quality Management Plan that is notated in the map attached to the permit.		
PPRC 2 Pollution Prevention Planning for New Development & Redevelopment		
The permittee shall maintain planning programs, procedures, and/or policies to develop and implement controls to reduce the discharge of pollutants from MS4 which receive stormwater from areas of new development or redevelopment.		
Element Task	**Frequency**	**Activity Required**
LFUCG Comprehensive Plan	Re-evaluate every 5 years	The permittee shall maintain a comprehensive planning process that is compatible with the prevention and reduction of pollutants from the MS4. The comprehensive plan shall identify management objectives for streams, wetlands, and other receiving water bodies. The comprehensive plan shall identify areas where urban development or redevelopment is likely to occur and shall consider relevant factors related to stormwater pollution prevention.
LFUCG Engineering Design Standards	To be reviewed by January 31, 2010 and every 3 years thereafter	The permittee shall maintain a comprehensive engineering design standards process that is compatible with the prevention and reduction of pollutants from the MS4. The design standards shall be a part of the comprehensive master planning process to prevent or reduce pollutants from the MS4. The designs standards shall maintain procedures for site planning which incorporate considerations of potential water quality and habitat impacts.
Low Impact Development Guidelines	Develop within three years of permit issuance	The permittee shall develop low impact development guidelines for new development and redevelopment.
PPRC 3 Maintaining Stormwater Structures		
The permittee shall maintain programs, procedures, and/or policies for residential and commercial construction projects to prevent or reduce pollutant in stormwater from the MS4. The permittee shall maintain procedures for site planning which incorporate considerations of potential water quality and habitat impacts.		
Element Task	**Frequency**	**Activity Required**
Greenway	Complete within one year of permit issuance	The permittee shall update Greenway inventory.
	Complete within two years of permit issuance	The permittee shall evaluate programs and procedures for maintenance of Greenways on public and private property.

TABLE 5. POLLUTION PREVENTION RESIDENTIAL AND COMMERICAL AREAS (PPRC)		
PPRC 3 Maintaining Stormwater Structures		
Element Task	**Frequency**	**Activity Required**
Structural Controls	Within 4 months of permit issuance	The permittee shall develop and propose an ordinance to the Urban County Council (UCC) that would require owners of privately-owned retention and detention basins and other privately-owned stormwater control structures to perform or arrange for proper maintenance, cleaning, and repair on the structures.
	Complete within two years of permit issuance	The permittee shall complete evaluation of programs and procedures for maintenance of post-construction stormwater quality controls on private residential and commercial property.
	By January 31, 2010	The permittee shall develop and commence implementation of a program to require private owners of stormwater controls to conduct or arrange for necessary maintenance, cleaning and repairs of the controls. The program shall address privately-owned retention ponds, detention basins, and other stormwater quality treatment facilities.
	Complete within two years of permit issuance	The permittee shall develop operations and maintenance guidelines for post-construction stormwater quality controls for use by private property owners that addresses structural and non-structural stormwater runoff control areas on private property.
PPRC 4 Inventory, Monitoring & Inspection		
The permittee shall maintain maintenance programs, procedures, and/or policies for structural controls that reduce pollutants (including floatables) from stormwater runoff from commercial and residential areas that are discharged from the MS4. The permittee shall maintain an inventory of structural and source controls, areas of use, and operational and maintenance records.		
Element Task	**Frequency**	**Activity Required**
Inventory and Mapping	Within 6 months of permit issuance	The permittee shall develop and commence implementation of a program to maintain publicly owned or operated stormwater controls to conduct necessary maintenance, cleaning and repairs of the controls. The program shall address publicly-owned or operated retention ponds, detention ponds, Stormceptors, catch basins, culvert inlets, and open channels. This program shall provide for inspections and for the scheduling and implementation of cleaning, maintenance, and repairs to be necessary during the inspections.
	Commencing in calendar year 2009, annually update the inventory and map	The permittee shall annually update the inventory and map of post-construction stormwater quality controls in residential and commercial areas, including detention basins, retention ponds, and stormwater quality treatment facilities.

TABLE 5. POLLUTION PREVENTION RESIDENTIAL AND COMMERICAL AREAS (PPRC)		
PPRC 4 Inventory, Monitoring & Inspection		
Element Task	**Frequency**	**Activity Required**
	By the end of the permit cycle	The permittee shall develop an inventory and a map of publicly-owned storm sewer pipes 18" and larger by the end of this MS4 KPDES permit cycle.
Inspection of Stormwater Controls	Complete within one year of permit issuance	The permittee shall develop procedures and checklists to facilitate inspections of post-construction stormwater controls. The permittee shall also develop an inspection schedule for the post-construction stormwater controls.
Detention Basin Inspection	At least 2 times per year	The permittee shall ensure the inspection of a substantial majority of the publicly and privately owned detention basins with reasonable potential to discharge pollutants to the MS4.
Retention Pond Inspections	At least once per month	The permittee shall ensure the inspection of a substantial majority of the publicly and privately owned retention ponds with reasonable potential to discharge pollutants to the MS4.
Critical Culverts and Structure Inspections	At least once per month and within three days of a rainfall of 1 inch or more in a calendar day	The permittee shall conduct inspections of a substantial majority of critical culverts and structures identified in the SWQMP for clogging and excessive sediment buildup.
Post - Inspection Activities	Within 6 months of permit issuance	The permittee shall prepare and implement a prioritized schedule for necessary repairs, cleaning, and maintenance for those structures for which LFUCG is responsible, based upon results of the inspection.
	Within 18 months of permit issuance	The permittee shall implement enforcement procedures to require responsible parties to perform necessary repair, cleaning, and maintenance for those structures for which LFUCG is not responsible, based upon results of the inspection.
	Within 3 years of permit issuance	The permittee shall develop procedures to identify, prioritize, and monitor select post-construction stormwater quality controls.
PPRC 5 Pollution Prevention Enforcement		
Element Task	**Frequency**	**Activity Required**
	Complete within two years of permit issuance	The permittee shall review the policies and procedures in regards to field enforcement programs and ensure consistency between individual inspectors. The permittee shall also review the applicable Code of Ordinances and recommend changes to inspection and enforcement procedures where appropriate.
PPRC 6 Evaluation		
Element Task	**Frequency**	**Activity Required**
	Evaluate controls once per permit cycle	The permittee shall evaluate the effectiveness of structural and source controls by the LFUCG Stormwater Manual.

TABLE 5. POLLUTION PREVENTION RESIDENTIAL AND COMMERICAL AREAS (PPRC)		
PPRC 7 Education		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall promote, publicize, and facilitate public reporting of the proper implementation of structural and source controls to reduce pollutants (including floatables) from stormwater runoff from the MS4. The permittee shall provide educational materials, public service announcements, and/or multimedia presentations regarding the implementation of structural and source controls to reduce or eliminate pollutants discharged from the MS4.
Website	Within one year of permit issuance	The permittee shall have a functional stormwater website.
	Periodically after development	The permittee shall advertise the development of the stormwater website to encourage utilization.
Hard copies	Complete within two years of permit issuance	The permittee shall have hard copies of the structure and source control materials and the Operations and Maintenance Manual available to the public.
PPRC 8 Training		
The permittee shall provide training for the public regarding the proper implementation of structural and source controls to reduce pollutants (including floatables) from stormwater runoff discharged from the MS4.		
Element Task	**Frequency**	**Activity Required**
Training for the Public	Complete within one year of permit issuance	The permittee shall identify staff and third party groups who are capable of providing training on pollution prevention in residential and commercial areas.
	Conduct one training session per year	The permittee shall develop and conduct training for the public that covers structural and source control planning, construction, operation, and maintenance, and will include receiving water impact and enforcement control.
Training for the Public	Complete within one year of permit issuance	The permittee shall identify staff and third party groups who are capable of providing training on pollution prevention in residential and commercial areas.
	Conduct one training session per year	The permittee shall develop and conduct training for the public that covers structural and source control planning, construction, operation, and maintenance, and will include receiving water impact and enforcement control.
	Complete survey forms within one year of permit issuance	The permittee shall develop audience surveys to measure attendance and evaluate the extent to which the target audience is being reached and ways to expand the audience reached.

TABLE 6. POLLUTION PREVENTION IN MUNICIPAL OPERATIONS (PPMO)

The objective is to develop, implement, and enforce programs and procedures to minimize pollutants from stormwater runoff from municipal operations to the municipal separate storm sewer system (MS4).

PPMO 1 Legal Prohibition/Control Authority

The permittee shall effectively establish by ordinance, regulation, permit or series of contracts which authorizes or enables the permittee to control, prevent, reduce, and eliminate pollutants from discharges of stormwater to the MS4. The Pollution Prevention Program only applies in Urban Areas.

PPMO 2 Municipal Construction Projects

The permittee shall maintain programs, procedures, and/or policies for municipal construction projects to prevent or reduce pollutants in stormwater from the MS4. The permittee shall maintain procedures for site planning which incorporate considerations of potential water quality and habitat impacts

Element Task	Frequency	Activity Required
Capital, Rehabilitation, and Reconstruction Projects	Complete by end of Year 2	The permittee shall update the general conditions section of the specifications for construction projects to educate contractors of their obligations under local, state, and federal permits and stormwater pollution prevention requirements.
Flood Management Projects	Complete by end of Year 2	The permittee shall update the general conditions section of the specifications for construction projects to educate contractors of their obligation under local, state, and federal permits and stormwater pollution prevention requirements.
Retrofitting of Existing Stormwater Management Structures and Systems	Develop by the end of Year 1	The permittee shall develop criteria for staff to use to prioritize water quality retrofitting projects.

PPMO 3 Maintaining Stormwater Structures

The permittee shall maintain maintenance programs, procedures, and/or policies for structural controls located on the permittee's properties or permittee maintained rights-of-way that reduce pollutants (including floatables) from runoff that are discharged from the MS4.

Element Task	Frequency	Activity Required
LFUCG Property	Complete within one year of permit issuance	The permittee shall develop and begin implementation of a program to maintain stormwater quality controls on LFUCG property, including, but not limited to maintenance, cleaning, and repairs based on inspection findings.
	Complete within one year of permit issuance	The permittee shall develop a database of stormwater quality controls at municipal facilities, including LFUCG properties and right of ways that discharge to the MS4.

TABLE 6. POLLUTION PREVENTION IN MUNICIPAL OPERATIONS (PPMO)		
PPMO 4 Municipal Practices		
The permittee shall maintain maintenance programs, procedures, and/or policies for controlling sources of pollutants		
Element Task	**Frequency**	**Activity Required**
Maintenance Activities for LFUCG Maintained Streets and Roads	Complete within one year of permit issuance	The permittee shall review, update, and begin implementation of procedures for maintenance activities for LFUCG maintained streets and roads, including street sweeping. The permittee shall review existing maintenance procedures and make suggestions or recommendations as necessary that would lead to improved receiving water quality.
Maintenance Activities for Facility Grounds, Rights-of-Way, Drainage Channels and Greenways	Complete within one year of permit issuance	The permittee shall review, update, and begin implementation of procedures for maintenance activities for facility grounds, rights-of-way, and drainage channels. The permittee shall review existing maintenance procedures and make suggestions or recommendations as necessary that would lead to improved water quality.
Deicing Operations	Complete within one year of permit issuance	The permittee shall review, update, and begin implementation of procedures for deicing operations by all divisions that have deicing practices. The permittee shall review existing deicing procedures and make suggestions or recommendations as necessary that would lead to improved receiving water quality.
Materials and Equipment Storage	Complete within one year of permit issuance	The permittee shall review, update, and begin implementation of procedures for materials and equipment storage. The permittee shall review Risk Management's existing procedures and implementation thereof.
Application of Turf Management Chemicals	Complete within one year of permit issuance	The permittee shall review, update, and begin implementation of procedures for controls for the application of turf management chemicals. The permittee shall review procedures for pesticide, herbicide, and fertilizer application and make recommendations as necessary that would lead to improved water quality.
General	Complete within two years of permit issuance	The permittee shall formalize operations and maintenance protocols for LFUCG staff that will include the following topics, but not limited to, roadway and parking lot maintenance, deicing, grounds and drainage way maintenance, equipment and materials storage, and pesticide, herbicide, and fertilizer application.

TABLE 6. POLLUTION PREVENTION IN MUNICIPAL OPERATIONS (PPMO)		
PPMO 5 Inventory, Monitoring, & Inspection		
The permittee shall maintain maintenance programs, procedures, and/or policies for controlling sources of pollutants. These programs or procedures shall be intended to reduce pollutants (including floatables) from runoff from municipal areas that are discharged from the MS4.		
Element Task	**Frequency**	**Activity Required**
Inventory	Complete within one year of permit issuance	The permittee shall create an inventory and map of stormwater quality control structures on LFUCG property.
Inspections	Develop within 4 months of permit issuance and commence implementation within 15 months of permit issuance	The permittee shall develop and commence implementation of an inspection schedule for known stormwater quality controls at LFUCG facilities.
Inspection Checklist	Complete within one year of permit issuance	The permittee shall develop procedures and checklists to facilitate inspections of known stormwater quality controls at LFUCG facilities.
Sample Stormwater Controls	Develop procedures within one year of permit issuance, begin implementation of procedures in Year 2	The permittee shall develop and implement procedures to identify, prioritize, and monitor (water sample) select stormwater quality controls.
PPMO 6 Training		
The permittee shall provide training for employees regarding the proper implementation of structural and source controls to reduce pollutants (including floatables) from stormwater runoff discharged from the MS4.		
Element Task	**Frequency**	**Activity Required**
Training for Employees	Complete within one year of permit issuance	The permittee shall identify staff and third party groups who are capable of providing training on pollution prevention for municipal operations.
	Conduct one training session per year	The permittee shall develop and conduct training for LFUCG employees.

TABLE 7.
INDUSTRIAL FACILITY & MUNICIPAL WASTE FACILITY
STORMWATER POLLUTION PREVENTION PROGRAMS (IN)

The objective is to develop, implement, and enforce programs and procedures to minimize pollutants from stormwater runoff from municipal waste management and industrial sites to the municipal separate storm sewer system (MS4).

IN 1 Legal Prohibition/Control Authority

The permittee shall control through ordinance, regulations, permit, operational procedures, or other regulatory means, the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity (as defined in 40 CFR 122.26(b)) and the quality of stormwater discharged from sites of industrial activity. Control authority shall also extend to stormwater discharges from operating or closed municipal landfills or other treatment, storage, or disposal facilities for municipal wastes. [Furthermore, refer to Table 3., Illicit Discharge Detection and Elimination for the control authority and prohibition of non-exempt, non-stormwater discharges; spills; dumping; or disposal of materials other than stormwater into the MS4.]

IN 2 Industrial Inventory

Element Task	Frequency	Activity Required
	On going	The permittee shall maintain an inventory of municipal waste facilities.
	Within 4 months of permit issuance	The permittee shall update the inventory of Industrial Facilities with reasonable potential to discharge pollutants to the MS4 on an annual basis, developing a schedule to verify the existing inventory on a watershed basis and procedures for verifying/adding new industries to the inventory.
	Within 4 months of permit issuance	The permittee shall compile an inventory of High-Risk Commercial Facilities and develop procedures for annually updating the inventory.
	Within 4 months of permit issuance	The permittee shall develop a database to track relevant information including enforcement and corrective action, regarding Industrial Facilities and High-Risk Commercial Facilities.

IN 3 Evaluation

Element Task	Frequency	Activity Required
	On going	The permittee shall maintain programs, procedures, and/or policies to review and evaluate the stormwater pollution plans, programs, and procedures of the municipal waste facilities and industries it determines present significant sources of stormwater pollutants to the MS4.

TABLE 7. INDUSTRIAL FACILITY & MUNICIPAL WASTE FACILITY STORMWATER POLLUTION PREVENTION PROGRAMS (IN)		
IN 4 Pollution Prevention Programs		
Element Task	**Frequency**	**Activity Required**
	Within One Year of Permit Issuance	The permittee shall develop example SWPPPs for Industrial Facilities and High Risk Commercial Facilities. The example SWPPPs will include general and industry-specific BMPs that can be used by the industrial facilities.
	Within 4 months of permit issuance	The permittee shall develop SWPPPs for any municipal waste facility that does not currently have one.
	Develop procedures and schedules by the end of Year 3	The permittee shall develop procedures and schedules for requiring submittal of SWPPPs from locally identified High-Risk Commercial Facilities.
IN 5 Inspection		
Element Task	**Frequency**	**Activity Required**
	Within One Year of Permit Issuance	The permittee shall develop procedures for conducting inspections of Industrial Facilities and municipal waste facilities to ensure compliance with local ordinances and requirements regarding pollution prevention. Procedures will also address education and enforcement mechanisms to address any deficiencies or violations found at the facilities.
	Commencing Calendar Year 2009	The permittee will inspect a substantial majority of the locally identified High-Risk Commercial Facilities each permit cycle.
	Commencing Calendar Year 2010	The permittee will inspect a substantial majority of the Industrial Facilities at least once every two years.
IN 6 Monitoring		
The permittee shall create, implement, and enforce programs, procedures, and/or policies for the monitoring of stormwater discharges from municipal waste facilities and industries that it determines presents significant potential sources of stormwater pollutants to the MS4.		
Element Task	**Frequency**	**Activity Required**
Industrial Monitoring	1st Permit Year	The permittee shall develop and propose an ordinance to the Urban County Council (UCC) that authorizes LFUCG to require Industrial Facilities and High-Risk Commercial Facilities with the potential to discharge pollutants in substantial amounts to the MS4 to develop and implement a stormwater monitoring program that includes providing the monitoring results to LFUCG.

TABLE 7. INDUSTRIAL FACILITY & MUNICIPAL WASTE FACILITY STORMWATER POLLUTION PREVENTION PROGRAMS (IN)		
IN 6 Monitoring		
Element Task	**Frequency**	**Activity Required**
Municipal Waste Facility Monitoring	Commencing 1st Permit Year, then annually	The permittee shall conduct wet weather outfall monitoring at municipal waste facilities.
Major Outfall Screening	*Dry weather* - once/2 years; wet weather - as needed	The permittee shall review and update procedures to conduct dry weather and wet weather sampling at large industrial outfalls of industrial facilities on the inventory. The permittee shall conduct dry weather sampling at identified large industrial outfalls of industrial facilities once every two years. The permittee shall conduct wet weather sampling at large industrial outfalls of industrial facilities as appropriate.
Representative Outfall Screening	*Dry weather* - once/permit cycle	The permittee shall conduct representative outfall dry weather screening.
IN 7 Enforcement of Controls		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall maintain enforcement programs, policies, and procedures to require compliance with the requirements of the pollution prevention programs for municipal waste facilities and industrial sites that discharge stormwater to the MS4.
IN 8 Education		
Element Task	**Frequency**	**Activity Required**
	On going	The permittee shall make available educational materials and/or multimedia presentations regarding the pollution prevention and enforcement programs and procedures to control pollutants in stormwater discharges to the MS4 from municipal waste facilities and industries. Educational materials shall discuss the impacts to the waters of the Commonwealth if such control measures are not used or are not properly implemented, constructed, operated or maintained.
IN 9 Training		
The permittee shall provide training for the proper implementation of programs and procedures to control pollutants in stormwater discharges from municipal waste facilities and industrial activities to the MS4.		
Element Task	**Frequency**	**Activity Required**
Training for Industry	Year 2	The permittee shall provide training for industry groups.
Training for Employees	Year 2	The permittee shall provide training for employees.

TABLE 8. WATER QUALITY MONITORING PROGRAM (MON)		
The objective is to develop and implement water monitoring programs and procedures to minimize pollutants from stormwater runoff to the municipal separate storm sewer system (MS4) from the coverage area specified by the permit.		
MON 3 Pollution Prevention Program Assessment Data Collection (MON 1 & 2, see SWQMP)		
The permittee shall maintain programs, procedures, and/or policies for the collection of representative data to assess the long term impacts upon the waters of the Commonwealth. Field screening locations shall include major outfalls, facility outfalls, in-stream screening points, or other field screening locations that are determined to yield representative data. Field screening points that are determined to yield representative data shall be accompanied by a narrative as to why that location was chosen; the frequency of sampling; parameters to be sampled; and a description of the sampling equipment.		
Element Task	**Frequency**	**Activity Required**
Expansion Area Stormwater Master Plan	Annually	Conduct a monitoring program for the Expansion Area 2
Dry Weather Monitoring for Major Watersheds	Quarterly	The permittee shall conduct a dry weather monitoring program for bacteriologicals, conventional parameters, nutrients, and metals at one location in each of the seven major urbanized watersheds: Town Branch, Wolf Run, South Elkhorn Creek, North Elkhorn Creek, Cane Run, West Hickman, and East Hickman.
Macroinvertebrate Sampling for Major Watersheds	Annually	The permittee shall conduct a macroinvertebrate sampling program at one location in each of the seven major urbanized watersheds: Town Branch, Wolf Run, South Elkhorn Creek, North Elkhorn Creek, Cane Run, West Hickman, and East Hickman.
Fish Sampling for Major Watersheds	Annually	The permittee shall conduct a fish sampling program at one location in each of the seven major urbanized watersheds: Town Branch, Wolf Run, South Elkhorn Creek, North Elkhorn Creek, Cane Run, West Hickman, and East Hickman.
Habitat Assessments for Major Watersheds	Annually	The permittee shall conduct a habitat assessment program at one location in each of the seven major urbanized watersheds: Town Branch, Wolf Run, South Elkhorn Creek, North Elkhorn Creek, Cane Run, West Hickman, and East Hickman.
Wet Weather Monitoring for Major Watersheds	Quarterly	The permittee shall conduct a wet weather monitoring program for bacteriologicals, conventional parameters, nutrients, and metals at one location in each of the seven major urbanized watersheds: Town Branch, Wolf Run, South Elkhorn Creek, North Elkhorn Creek, Cane Run, West Hickman, and East Hickman.
Creation of Permanent Monitoring Network	Begin Trial Study in Year 2	The permittee shall create a program and procedures for establishing a permanent monitoring network after completing a trial study comparing continuous versus discrete monitoring.
Database	Update Annually	The permittee shall compile all sampling field data and laboratory results in a database, putting results on website and in the Annual Report when finalized.

TABLE 8. WATER QUALITY MONITORING PROGRAM (MON)		
MON 4 Public Education and Public Outreach		
Element Task	**Frequency**	**Activity Required**
	Update Annually	The permittee shall maintain a program to make results available to the public.
MON 5 Seasonal Pollutant Loading and Event Mean Concentration Estimations		
The permittee shall maintain procedures to provide estimates for each major outfall of the seasonal pollutant load and the event mean concentration of a representative storm. The permittee shall perform the necessary calculations for the following parameters, as detected: estimated flow, total suspended solids, total dissolved solids, chemical oxygen demand, 5-day biochemical oxygen demand, oil and grease, fecal coliform, E. coli, pH, total Kjeldahl nitrogen, nitrate plus nitrite, dissolved phosphorus, total ammonia plus organic nitrogen, and total phosphorus. The permittee shall provide calculated estimates on the website and in the Annual Report. The calculation of seasonal pollutant loads and event mean concentration shall be done for each watershed based upon the following schedule		
	Year 1	Town Branch and Wolf Run
	Year 2	South Elkhorn
	Year 3	Cane Run and North Elkhorn
	Year 4	West Hickman
	Year 5	East Hickman
MON 6 Education and Training		
Element Task	**Frequency**	**Activity Required**
	Complete by end of Year 1	The permittee shall identify staff and third party groups who are capable of providing training on water quality monitoring.
	Beginning in Year 2, complete at least one training event per year	The permittee shall conduct training for employees and/or citizens involved in the monitoring components of this program element.
	Complete survey forms by end of Year 1	The permittee shall develop audience surveys to measure attendance and evaluate the extent to which the target audience is being reached and ways to expand the audience reached.
MON 7 Evaluation		
Element Task	**Frequency**	**Activity Required**
	Develop evaluation protocol in Year 1	The permittee shall develop a protocol to evaluate the monitoring results to determine the effectiveness of the monitoring program and an assessment as to whether water quality is improving or degrading.
	Annually	The permittee shall conduct annual comparisons of data to determine relative receiving stream health.
	Year 5	The permittee shall conduct a comprehensive assessment in Year 5 of the permit that includes a trend analysis of changes in each watershed over the permit cycle.

TABLE 9 Reporting and Recordkeeping (RR)		
The objective is to document all the reporting and recordkeeping requirements of the permit.		
RR 1 Reporting and Record Keeping		
The permittee is required to document and report the requirements of the permit and report annually to the permitting authority (KYDOW). The Annual Report is required under 40 CFR 122.42 (c)		
Element Task	**Frequency**	**Activity Required**
Checklist Development	Complete within twelve months of permit issuance	The permittee shall develop checklists for preparing the Annual Report
	Develop contents within one year of permit issuance	The permittee shall develop the contents of the Annual Report that covers the activities associated with each program element in accordance with Part III D of the permit.
	Complete Annual Report in accordance to schedule in the permit	The permittee shall prepare an annual report and submit in accordance with the schedule in Part III D of the permit.
Recordkeeping Procedures	Complete within one year of permit issuance	The permittee shall develop record keeping procedures that will allow for the retention of records for a period of five years.

PART III. MONITORING AND REPORTING

A. MONITORING PROGRAM REQUIREMENTS

1. The quality of the streams receiving MS4 discharges in Fayette County shall continue to be monitored to assess the water quality of the streams and to identify potential water quality impairments. This shall be accomplished by implementing the program elements in Table 8, which include characterization data collection for watershed management programs assessment and the calculation of seasonal pollutant loadings and event mean concentration estimates.

2. LFUCG will continue or maintain several facets of its current sampling program:

   a. A modified version of the monitoring program in the Expansion Area 2, which includes portions of the East Hickman and North Elkhorn watersheds, will resume in order to evaluate the effectiveness of the regional stormwater controls and the Stormwater Manual. The Expansion Area 2 is a 4,100 acre area of land that was added to the Urban Services Area in 1996. It is located on the east side of Lexington.
   b. Dry weather monitoring shall continue at in-stream locations. There will be one site chosen in each of the major urban watersheds. The frequency of sample collection will increase from once per year to quarterly. The list of chemical parameters is included below.
   c. Annual macroinvertebrate sampling shall continue at one location in each of the seven watersheds.
   d. Fish sampling shall continue on a once per year basis at seven sites.
   e. Habitat assessment will continue once per year at the seven sites selected for macroinvertebrate, fish, and dry weather collections.
   f. Wet weather monitoring shall begin on a quarterly basis at the seven watershed sites. The list of parameters shall be the same as for the dry weather sampling. The list is as follows:

      Flow
      Total Suspended Solids
      Total Dissolved Solids
      Fecal Coliform
      E. coli
      Oil & Grease
      Biochemical Oxygen Demand, 5-day
      Chemical Oxygen Demand
      Total Recoverable Lead
      Total Recoverable Copper
      Total Recoverable Cadmium
      Total Recoverable Zinc
      Total Phenols
      Dissolved Phosphorus
      Total Phosphorus
      Ammonia
      Total Kjeldahl Nitrogen
      Nitrate plus Nitrite
      Total Hardness
      pH

3. LFUCG shall conduct a pilot study in Year 2 of continuous versus discrete monitoring for precipitation, flow, pH, dissolved oxygen, temperature, and conductivity. At the end of the pilot study, the value of the continuous monitoring data versus the discrete monitoring data shall be assessed. This assessment will determine the future direction for continuous versus discrete monitoring. A plan for Years 3 through 5 will be proposed to the KDOW.

Compliance with these terms is achieved by implementing the program elements, as shown in Table 8 (Water Quality Monitoring Program) in Section E of Part II, except where inconsistent with other provisions of this permit.

B. REPORTING REQUIREMENTS FOR MONITORING PROGRAM

1. The permittee shall submit a stormwater monitoring report annually on the same schedule as the annual report under Part III, Paragraph D of this permit. This report shall include:
   a. Status of implementation of the monitoring program;
   b. Map(s) showing monitoring station locations and narrative site descriptions, including watershed size;
   c. Raw data, results, methods of evaluating the data, graphical summaries of the data, and an explanation/discussion of the data for each component of the monitoring program;
   d. An analysis of the results of each monitoring program component;
   e. A comparison of that year’s data to the previous year’s data to determine the relative health of the receiving waters;
   f. The seasonal pollutant load and event mean concentration estimates for the watershed(s) scheduled for that particular year of the permit; and
   g. All monitoring reports shall be submitted in hardcopy and electronically.

2. In Year 5 of the permit, the Annual Report will also include a comprehensive monitoring program assessment. This assessment will include the following:
   a. A trend analysis will evaluate the changes that have taken place in each watershed during the permit cycle (Years 1 through 5). The trend analysis will build on the annual comparisons in Years 1 through 4; and
   b. An evaluation of the monitoring program, which will be used to help formulate tasks and objectives for the next permit cycle.

3. Per 40 CFR 122.26(d)(2)(iii)(C),(incorporated by reference in Kentucky Regulations at 401 KAR 5:060, Section 14), the permittee shall propose a schedule to provide estimates for each major outfall of the seasonal pollutant load and event mean concentration of a representative storm for any constituent detected in any sample required under paragraph (d)(2)(iii)(A). Table 7, Water Quality Monitoring Program (MON), Program Element MON-5, shows the proposed schedule for determining these estimations. The effort shall proceed on a watershed basis and by Year 5, this task will be complete.

   The seasonal pollutant load and event mean concentration for each watershed may be estimated from past wet weather data and shall take into consideration land uses and drainage areas of each watershed. The results from this effort shall be included in the Annual Report.

4. Sampling methodology shall be according to the EPA storm water application regulations at 40 CFR 122.26, (incorporated by reference, in Kentucky Regulations at 401 KAR 5:060, Section 14)

5. Monitoring must be conducted according to test procedures approved under 40 CFR 136 (incorporated by reference, in Kentucky Regulations at 401 KAR 5:060, Section 14), unless other test procedures have been specified.

Compliance with these terms is achieved by implementing the program elements, as shown in Table 9 (Reporting and Recordkeeping) in Section E of Part II, except where inconsistent with other provisions of this permit.

C. OUTFALL MAPPING

Per 40 CFR 122.26(d)(2)(iii)(C),(incorporated by reference in Kentucky Regulations at 401 KAR 5:060, Section 14), the permittee shall provide the location of all known major outfalls. The outfalls shall be identified in the annual report for Year 2 of the permit; with updates describing any additionally identified major outfalls in each subsequent annual report. For the purposes of this permit a "major outfall" is defined as follows:

1. A pipe (or closed conveyance) system with a cross-sectional area equal to or greater than 7.07 square feet (e.g., a single circular pipe system, with an inside diameter of 36 inches or greater); if applicable.

2. A single conveyance other than a pipe, such as an open channel ditch, which is associated with a drainage area of more than 50 acres; if applicable.

3. A pipe (or closed conveyance) system, draining "industrial-zoned land use," with a cross-sectional area equal to or greater than 0.79 square feet (e.g., a single circular pipe system, an inside diameter of 12 inches or greater); or if applicable.

4. A single conveyance other than a pipe, such as an open channel ditch, which is associated with an "industrial-zoned land use" drainage area of more than 2 acres; if applicable.

D. ANNUAL REPORTING REQUIREMENTS

The permittee shall prepare an annual system-wide report to be submitted no later than July 15th of the year following the period covered by the report. The annual report shall cover the period beginning on January 1 through December 31, 2009, and annually thereafter. The annual report shall include but not be limited to:

1. A summary of monitoring data accumulated during the report year (40 CFR 122.41, incorporated by reference, in Kentucky Regulations at 401 KAR 5:060, Section 14).

2. An overall evaluation of the SWQMP developments and progress including: major findings such as water quality improvements or degradation, major accomplishments, overall program strengths/weaknesses; and future direction of program. The permittee will make an overall determination of the effectiveness of the SWQMP taking into account water quality/watershed improvements.

3. Brief discussion of the program elements listed in Tables 1-9 following applicable SWQMP elements.

4. Status of the implementation and proposed changes to the SWQMP to include assessment of controls and specific improvements or degradation to water quality.

5. Summary of inspections and enforcement actions for regulatory programs.

6. Implementation status of the public education programs.

7. Status of expenditures and budget for the present year and the next permit year.

8. The permittee shall submit the original annual report to:

Kentucky Division of Water
Surface Water Permits Branch
200 Fair Oaks Lane, 4th Floor
Frankfort, Kentucky 40601

E. CERTIFICATION

All applications, reports, or information submitted to the Division of Water (DOW) shall be signed and certified pursuant to State and U.S. EPA regulations KAR 5:060, Section 9(4). Each report shall contain the following completed declaration:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
>
> Executed on the day of__, month, year.
> (Signature) (Title)"

F. REOPENER CLAUSE

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:085, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

PART IV. STANDARD CONDITIONS FOR KPDES PERMIT

The permittee is also advised that applicable KPDES permit conditions in KPDES regulation 401 KAR 5:065, Section 1, will apply to all discharges authorized by this permit.

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

STEVEN L. BESHEAR
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

LEONARD K. PETERS
SECRETARY

July 9, 2009

Re: Lexington-Fayette Urban County Government
MS4 Permit
KPDES No.: KYS000002
AI No.: 74551
Fayette County, Kentucky

Dear Commenter:

Your comments concerning the above-referenced draft permit have been reviewed and responses prepared in accordance with Kentucky Pollutant Discharge Elimination System (KPDES) regulation 401 KAR 5:075, Section 12. The comments have been briefly described below and our responses to those comments follow:

COMMENT 1: The draft KPDES Permit No. KYS000002 for the Lexington-Fayette Urban County Government (LFUCG) improperly limits the scope of permit coverage and applicability to a portion of the jurisdiction of that government, illegally and improperly excluding all lands outside the Urban Services Boundary (USB), and the Rural Activity Centers (RACs), which limitation would fail to provide permit coverage for other residential and commercial properties currently located outside the USB and the RACs. Permit boundary areas must be clearly defined – in narrative and in the GIS. Boundaries and expectations must be clearly defined. The permit coverage must coincide with the jurisdiction of the LFUCG. It must be countywide.

RESPONSE 1: The KPDES permit boundaries are established as the jurisdictional boundaries of Fayette County. The commenter is incorrect that the permit boundaries apply only to a portion of the jurisdiction of LFUCG. Consistent with the MS4 program regulations, the permit provides for different levels of program implementation dependent upon population density. More aggressive program implementation is required in urbanized areas. The map included with the permit and fact sheet identifies the urbanized areas within Fayette County. This concept is also discussed within the Storm Water Quality Management Program. The permit boundaries also mirror the boundaries that were established by the Consent Decree.

COMMENT 2: KPDES Permit KYS000002, Part I, Applicability, Section A, defines Permit Coverage Area, and the first sentence of that paragraph correctly states that the MS4 permit applies to the LFUCG's Municipal Separate Storm Sewer System (MS4) to the Waters of the Commonwealth throughout Fayette County due to Lexington's status as a merged government. However, without logical or legal basis, the next sentence of that paragraph limits to the "Urban Areas" the "Illicit Discharge and Detection and Elimination (except as associated with the Industrial Facilities Program), Pollution Prevention in Residential and Commercial Areas, and Pollution Prevention for Municipal Operations". There is no need to limit these aspects of the permit to "Urban Areas"-these aspects of the permit and all aspects of the permit must apply throughout Fayette County.

RESPONSE 2: The decision to limit the Illicit Discharge and Detection Elimination program, along with the Pollution Prevention in Residential and Commercial Areas, and Pollution Prevention for Municipal Operations, allows LFUCG to focus their efforts on the area with the biggest potential for Illicit Discharges, the Urbanized Area. The other control measures such as construction site runoff, etc. will be addressed throughout the area delineated on the map attached to the permit. The preamble to EPA's December 8, 1999, regulations and the November 16, 1990, regulations recognizes that permits are to be flexible and should be tailored to meet particular geographical, hydrological, and other local conditions. So it is appropriate to tailor program elements based upon the potential severity of issues.

COMMENT 3: The boundary of any and all MS4 boundaries and the start of the Waters of the Commonwealth (WC) must be clearly defined and a list must be created for public comment.

RESPONSE 3: There is no requirement in the regulations for the permit to identify "all MS4 boundaries" or the "start of the Waters of the Commonwealth." It would be unduly burdensome to require MS4 KPDES permits to identify every stream or stream segment that may be considered a water of the United States or water of the Commonwealth within the permit boundary. The permit appropriately applies to all discharges from LFUCG's MS4 to Waters of the Commonwealth within Fayette County. MS4 is broadly defined to include roads with drainage systems, municipals streets, catch basins, curbs, gutters, ditches, and storm drains and conveyances owned and operated by LFUCG that discharge to Waters of the Commonwealth. It would be impossible to identify the full extent of the MS4 in the permit application or permit.

COMMENT 4: Several commenters remarked that the permit excludes the University of Kentucky MS4 and the Kentucky Transportation Cabinet's MS4. Where these MS4 systems have not been permitted, the LFUCG Permit should apply to these areas until they are separately permitted by those entities.

RESPONSE 4: While LFUCG may become a co-permittee with other entities that are required to obtain a KPDES permit for MS4 discharges, it is not obligated to do so. Accordingly, LFUCG is not obligated to obtain a KPDES permit for MS4s owned and operated by the University of Kentucky or the Kentucky Transportation Cabinet. Those entities are responsible for obtaining KPDES permit coverage for their respective MS4 systems. The University of Kentucky is currently drafting their own Storm Water Quality Management Plan and is therefore expected to obtain its own MS4 permit to manage the stormwater discharges from its jurisdiction. Likewise, the Kentucky Transportation Cabinet will have a separate MS4 permit.

COMMENT 5: The draft KPDES Permit No. KYS000002 asserts that there are no numeric effluent limitations associated with the permit, but fails to expressly identify the narrative effluent limitations that are required to be part of this permit. The U.S. EPA was sued for failure to promulgate numeric effluent limits for stormwater. As a result of that suit, on November 28, 2008, EPA issued Proposed Effluent Limitation Guidelines and Standards for the Construction and Development Industry. These effluent limit guidelines or "ELGs" will set technology-based performance requirements for active construction sites covered by NPDES permits, including this permit. Kentucky Division of Water (DOW) is well aware of this process and has discussed the need for numeric stormwater limits as part of the recent discussion of anti-degradation as it applies to the draft general permit for construction. The permit should be withdrawn and reissued with appropriate numeric and narrative effluent limits. In addition, the SWQMP must be included as an effluent limit.

RESPONSE 5: The EPA's proposed November 28, 2008, effluent limitation guidelines apply to the construction industry. They do not apply to MS4s, unless the MS4 is a qualifying local program. Moreover, the proposed regulations are not final. Section 402(p) of the Clean Water Act requires that KPDES permits for MS4s control pollutants and stormwater runoff to the maximum extent practicable ("MEP"). The MEP standard may be met through Best Management Practices ("BMPs") and numeric effluent limitations are not required for KPDES permits for MS4s. See Environmental Defense Center, Inc. v. EPA, No. 00-70014 (9th Cir. 2003); Defenders of Wildlife v. Browner, 191 F.3d 1159 (9th Cir. 1999). The permit meets MEP control requirements consistent with state and federal regulations and the Clean Water Act. MS4 requirements listed in Tables 1-9 with specific deadlines/timetables represent Maximum Extent Practicable control and constitute the effluent limits.

COMMENT 6: The draft KPDES permit improperly excludes the SWQMP from the permit, in clear violation of the Waterkeeper opinion; the SWQMP must be defined as an effluent limit. KPDES Permit KYS000002, Part I, Applicability, Section C, includes Definitions, including the definition of "Storm Water Quality Management Plan" or "SWQMP" as "a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system." This definition is inadequate – the SWQMP must be defined as an effluent limit that is part of this KPDES permit. It is an effluent limit. This matter has been litigated and is settled law. As part of the permit, the SWQMP must be subject to public participation and comment and must receive meaningful and careful review by the Division of Water. The DOW must withdraw this permit and require the applicant submit the SWQMP to the DOW as part of the permit application and the SWQMP must be included in the public notice and opportunity to comment as a narrative effluent limit and permit requirement.

RESPONSE 6: The SWQMP is a dynamic document that must be updated to address failed BMPs and other necessary changes (i.e., responsible parties, or frequencies) and is a plan to implement the requirements of the permit and not subject to permit requirements. The Waterkeeper Alliance, Inc. v. EPA decision does not require the Storm Water Quality Management Plan (SWQMP) to be incorporated into the permit as an effluent limitation. The technology-based MEP requirements are delineated in the permit. See Tables 1 through 9. The SWQMP, like Storm Water Pollution Prevention Plans under U.S. EPA's multi-sector general permit for stormwater discharges associated with industrial activity, is a tool to assist both the permittee and inspectors in ensuring and documenting that effluent limitations established in the permit are met. The SWQMP is not independently enforceable as an effluent limitation. See also 401 KAR 5:060 § 12(3) (b) 4, which provides proposed management, programs "shall be considered by the Cabinet when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable." Like the SWPPP under the multi-sector general permit for stormwater discharges associated with industrial activity, the SWQMP documents specific control measures the discharger will utilize in its implementation plan to meet the MEP requirements of the permit. Accordingly, it is not necessary for there to be a public notice and an opportunity to comment on the SWQMP as MEP is defined and delineated within the permit. It should be noted, however, that the SWQMP was subject to public notice and opportunity to comment as part of the public notice on the Consent Decree negotiated in 2008 among Kentucky, U.S. EPA, and LFUCG. The SWQMP is also available for public review on LFUCG's stormwater website. It was identified in the Fact Sheet for the draft permit, and was available for review at DOW.

COMMENT 7: The draft KPDES Permit No. KYS000002 fails to comply with the Clean Water Act and Kentucky antidegradation requirements at 401 KAR 5:029 et seq., and contains inadequate language to prevent further impairment of impaired waters. The proposed LFUCG permit must be withdrawn and re-noticed after it has permit conditions that protect water where the water quality exceeds that needed to support the designated uses of aquatic habitat and recreation.

RESPONSE 7: The Division has determined that KPDES permit terms and conditions are sufficiently stringent to prevent any significant lowering of water quality in high quality and exceptional waters that may exist in Fayette County for any new or expanded discharges from the MS4. The basis of this determination follows: (1) new construction activity (the source of most new or expanded discharges) will already be subject to antidegradation review under new general or individual KPDES permits; (2) any new or expanded discharges of stormwater from an MS4 are not truly "new" discharges because the area served by the expanded MS4 already discharges stormwater to the receiving stream during rain events; (3) MS4 discharges are subject to maximum extent practicable control standards, including such standards for discharges from new development or redevelopment on a post-construction basis, such as through ordinances implemented by LFUCG to limit peak discharges. Accordingly, new or expanded discharges of stormwater from an MS4 are inherently different from a discharge of process water under a KPDES permit. Thus, the KPDES permit is considered sufficiently stringent to prevent any significant lowering of water quality with respect to new or expanded discharges from the MS4 during wet weather events. In addition, the Division has determined that orderly growth of municipalities in the form of new development is critical to accommodate important social and economic interests. To the extent that lowering water quality during wet weather events would occur despite the application of the MEP standard set forth in the KPDES permit, and lowering is necessary to accommodate important social and economic interests in the area.

COMMENT 8: The proposed permit for LFUCG contains an inadequate discussion of how the permit will prevent further pollution of Impaired Streams. Fayette County currently has a long list of Impaired Stream segments, and currently has only four TMDLs, but with many more TMDLs pending. At Page II-5, the DOW has the option "may require" to reopen the permit after a TMDL is approved. However, the next paragraph seems to invite the LFUCG to seek a variance or seek a use attainability analysis rather than reduce the pollutant loading as needed to cause the stream segment to come into compliance. An earlier version of this permit contained a requirement that the LFUCG would make adjustments to comply with TMDL waste load allocations within six months and if inadequate progress was being made over a two year period, the DOW could take action to reopen the permit. We felt that was too long, however, now there are no time limits. All three paragraphs on TMDLs and Impaired Waters require (or "may require") that the SWQMP be modified to address these matters. This remedy makes it all the more essential that the SWQMP be part of the KPDES permit.

RESPONSE 8: The permit expressly provides that upon promulgation of a total maximum daily load, to the extent the TMDL applies to MS4 discharges, KDOW may require that the SWQMP be modified to address any applicable and appropriate BMPs to implement the TMDL within a reasonable timeframe. Accordingly, the KPDES permit includes provisions to include TMDLs in a manner consistent with the Clean Water Act, which is to reopen the KPDES permit as appropriate. Moreover, the permit provides for the permittee to also evaluate a newly established TMDL and to propose any new applicable or appropriate BMPs to reach the wasteload goal of the TMDL. It is wholly appropriate to provide the permittee with a reasonable period of time to implement any requirements established by a TMDL. Accordingly, the Division does not agree with this comment.

The permit also appropriately addresses impaired waterbodies that lack a TMDL. Prior to the development of a TMDL, the permittee is required to evaluate its BMPs with respect to any new or expanded MS4 discharges for pollutants that discharge to and impaired waterbody. Because new or expanded MS4 discharges are added throughout the permit term, specific program requirements cannot be evaluated at the time of permit issuance. Accordingly, the permit appropriately provides for that analysis prior to the new or expanded discharge in the future. It should also be noted that TMDLs will be required for impaired streams, which will control after their development.

COMMENT 9: The draft KPDES Permit No. KYS000002 fails to adequately limit the discharge of pollutants into the MS4 system, and illegally seeks to exclude the existing MS4 drains, ditches, channeled streams, and pipes from the Waters of the Commonwealth. KPDES Permit No. KYS000002, Part 1, Applicability, Section B, Authorized Discharges, violates EPA stormwater permitting regulations and guidance by failing to expressly prohibit the discharge of non-stormwater INTO the MS4 system as well as OUT OF the MS4 system. The Limitation language must be re-written to add the following phrase to both Sections (B) (1) (a) and (b):

“into the MS4 or from the MS4”

The definition of “Waters” or “Waters of the Commonwealth” must have the following language to clarify: “This definition includes waters within the ditches, channels, and pipes that were at any prior time Waters of the Commonwealth, including such conveyances that are now included within the MS4.” This permit must contain language that makes clear that the alternation of existing streams and surface waters for purposes of stormwater detention or retention shall be prohibited.

RESPONSE 9: There is no basis for redefining "Waters of the Commonwealth" as proposed by the commenter. Waters of the Commonwealth is defined by KRS Chapter 224. In many cases, a factual determination will need to be made to determine whether an effluent ditch is a Water of the Commonwealth, or a component of the MS4, or a private wastewater conveyance system. The permit requires the application of MEP controls to stormwater discharges. In some instances, control standards are applied before discharges enter the MS4. However, the KPDES permit is required because of discharges to the MS4 to Waters of the United States, and the regulations expressly relate to "discharges" from an MS4. See 401 KAR 5:060 § 12(3) (b) 4. The permit appropriately applies to a suite of controls to meet the MEP standard, including controls applied to stormwater runoff from industrial, commercial, and construction activities prior to stormwater entering the MS4.

In addition, the KPDES permit does not address or authorize construction of stormwater detention or retention structures within the Waters of the Commonwealth. Such construction activities must be authorized under Section 404 of the Clean Water Act and Division regulations at 401 Chapter 4.

COMMENT 10: The Water Quality monitoring program requirements are not adequate and constitute "backsliding" in violation of the anti-backsliding requirements of the CWA.

RESPONSE 10: Anti-backsliding provisions of the CWA apply to technology-based limitations. Monitoring requirements are not considered technology-based limitations or water quality-based limitations. Accordingly, anti-backsliding requirements do not apply to changes in monitoring programs. Flexibility must exist in MS4 monitoring programs to allow adjustments based upon perceived need.

COMMENT 11: Definition #19 defines a "LTMN" as an acronym for a "Long Term Monitoring Network". We have not been able to find that term anywhere in the permit, while the term "Stormwater Manual" is used but is not included in the definitions. This term must be defined and available for public review and comment if it is going to be referenced in the permit.

RESPONSE 11: In response to this comment, the term Long Term Monitoring Network has been removed from the list of definitions. The term Stormwater Manual has been added to the list of definitions.

COMMENT 12: Part III, Monitoring and Reporting, addresses the monitoring and reporting requirements of the permit. The permit requirement is not adequate. Effective monitoring is essential to permit effectiveness; sampling at one location within a huge watershed will not provide useful data and will prevent the water quality in these watersheds from being characterized. This reporting requirement should be reconciled with the 124 monitoring locations referenced in Table 3, under the IDDE Monitoring Program.

RESPONSE 12: The KPDES permit applies to all Waters of the Commonwealth within Fayette County. A rule of reason must be applied in determining the scope of any wet weather and MS4 discharge monitoring program. The permit provides for and identifies a comprehensive monitoring program. The Division has determined the monitoring program is adequate.

The monitoring program covered in Part III relates to a county-wide monitoring effort of streams and creeks. The 125 monitoring locations referenced in Table 3, under the IDDE program, are outfalls monitored for dry weather screening to determine if illicit discharges are occurring. The objective of these two monitoring activities is different.

COMMENT 13: The existing permit requires the continuous monitoring of the flow from Expansion Area 2, for the purpose of insuring that development in that area would not adversely impact the lake in Jacobson Park, which is part of the drinking water supply for Lexington. Condition Number IV, Fiscal Requirements, of the existing permit did not maintain this program and then stopped gathering this data. The DOW should withdraw this permit and re-evaluate the monitoring program to require LFUCG to resume continuous monitoring where it has previously conducted such monitoring and to expand the locations and frequency of wet and dry weather monitoring to provide meaningful data and the ability to actually assess how well the SWQMP is working.

RESPONSE 13: The Division disagrees with this comment because the existing permit does not specifically require the continuous monitoring of the flow from Expansion Area 2 (EA2). However, there is a monitoring program requirement for the EA2 in the proposed permit and there is a monitoring program requirement to evaluate continuous monitoring in Year 2. The permit provides for and identifies a comprehensive monitoring program. The Division has determined the monitoring program is adequate.

COMMENT 14: The Fact Sheet describes the Administrative Record without any reference to the Consent Decree that the Cabinet and EPA entered into with the LFUCG nor any reference to the comments submitted concerning that Consent Decree. We request that the Consent Decree and the public comments be included in the description of the Administrative Record.

RESPONSE 14: The Consent Decree negotiated between U.S. EPA, the Commonwealth of Kentucky, and LFUCG is not currently in effect. There was a separate public notice and comment opportunity associated with that Consent Decree. While it is related, it is not part of the administrative record for the KPDES Permit. However, LFUCG's Stormwater Quality Management Program dated January 1, 2008, is a part of the administrative record on the KPDES permit as noted in the Fact Sheet. It was available for review in the Division's file, as well as being available for review on LFUCG's website. The Stormwater Quality Management Program was also a part of the administrative record relating to the Consent Decree.

COMMENT 15: Part II-(B.) Storm Water Quality Management Program, makes reference to "combined sewer overflow point sources." Lexington is not a combined sewer city. This reference appears to be in error.

RESPONSE 15: The reference to combined sewer overflow points was not intended as a statement that LFUCG's sanitary sewer system is a combined system. The commenter is correct that Lexington is not a combined sewer city. The KPDES permit does not address combined sewer overflows. This reference is in error and has been corrected.

COMMENT 16: Part II-(F.) Fiscal Requirements says "Funding shall be established and maintained to ensure the accomplishment of the activities required by this permit". The DOW should require LFUCG to submit a proposed budget of the estimated costs of the activities required by the permit and the source of funds. Budget and expenditures are required to be in the annual reports under Part III (D.), but that does not provide the public with any opportunity to comment on

RESPONSE 16: The MS4 program does not require permit terms or conditions relating to submittal of stormwater budgets or estimated cost of activities. KPDES permittees are required to implement the controls and limitations set forth in the permit, which generally requires the municipality to fund the program in some manner. The permit requires funding to be established and maintained to ensure requirements of the permit are met. Any opportunity to comment on LFUCG's budgets for stormwater will need to be raised during LFUCG's annual budgeting process. Therefore, submissions of budgets by LFUCG are not an appropriate condition of a KPDES permit.

COMMENT 17: In comparing the past water quality programming activities by LFUCG related to stormwater education, outreach, and public participation (as reported in previous annual reports of the permittee) and the requirements in the proposed permit, it appears there is considerable less activity required by the proposed permit that which has been performed in the past. Therefore, it appears the permittee is being allowed to "backslide" from their previous programs to a greatly reduced public education and participation programming effort. The Public Education and Outreach provisions in Table 1 of the proposed permit do not appear to be adequate and should be reconsidered.

RESPONSE 17: The Division disagrees with the comment that the stormwater education, outreach, and public participation program is inadequate or represents backsliding. No specifics were provided by the commenter as to the basis for this general comment. Moreover, the prior MS4 permit did not establish any specific requirements for this program element. It should also be noted that consistent with EPA's stormwater regulations, permittees have the flexibility to amend and modify programs as necessary to assure appropriate allocations of funding based upon need.

COMMENT 18: Part II, Page II-5, C. Implementation Plan Review and Modification. (4) concerning the provisions of the SWQMP. This paragraph does not seem congruent with the other statements in Part II C. regarding SWQMP modifications, or with Part II e. regarding compliance schedule. This paragraph is not clear whether activities described in the SWQMP narrative or the Permit narrative or the Tables comprise compliance with the Permit. Clarification of this provision of the permit is requested.

RESPONSE 18: The SWQMP is an implementation plan to be utilized as a tool. The specific program elements that are considered MEP are delineated in the permit itself and specifically in Tables 1 through 9. The SWQMP indicates the requirements of the Tables with respect to program conditions will be implemented, including procedures. Accordingly, the specific contents of the SWQMP are not considered permit conditions in and of themselves. It describes the processes that will be used by the permittee to meet the requirements of the permit. The Division does not believe Paragraph 4 is inconsistent with other conditions of Part II, Section C.2. relating to modifications of the SWQMP. Changes in requirements set forth in the Tables cannot be made without modifying the permit as those are considered MEP requirements.

COMMENT 19: Part II, Page II-5, D. Total Maximum Daily Loads and Impaired Waters. Clarification is requested in regard to issues raised by this section. Specifically, the statutory authority be identified and referenced which enables the Environment and Energy Cabinet to apply a numeric wasteload allocation developed through a TMDL, or any other process, through the MS4 permit process, rather than utilizing the established legal requirement of Maximum Extent Practicable (MEP).

RESPONSE 19: LFUCG may utilize BMPs that are considered MEP to meet the numeric wasteload allocation established through a TMDL. This is consistent with EPA guidance and regulations. Authority for requiring numeric limitations in the permit will be based upon Section 303(d) of the Clean Water Act and EPA's implementing regulations at 40 CFR 130.

COMMENT 20: What is the purpose of establishing the category "High Risk Commercial Facilities" as defined on Page I-2 #10, since such a term does not exist in state stormwater regulations? Is it correct to assume that the University and its associated operations do not qualify as "commercial" facilities?

RESPONSE 20: Pursuant to 401 KAR 5:060 § 12(3) (b) 4., Phase I communities are to establish programs to monitor and control pollutants in stormwater discharges to MS4s from industrial facilities that the municipal permit applicants determine are contributing a substantial pollutant loading to the MS4s, as well as industrial facilities subject to Section 313 to Sara Title III. This provision, which is also included in LFUCG's proposed Consent Decree, allows LFUCG to identify commercial facilities that are considered to have high risk of discharging stormwater runoff with substantial pollutant loads to the MS4. This is inherent in the definition of high-risk commercial facility in the definition section of the permit. Note that institutional facilities, such as university operations and hospitals, may also qualify as commercial facilities. LFUCG will need to ensure that its ordinances support regulation of all such facilities that it determines have the potential to discharge pollutants of concern at significant levels to the MS4.

COMMENT 21: In so much as the University will soon have its own MS4 permit and based on the definition of "Permittee" on Page I-3, #24, is it the case that LFUCG is not responsible for MS4 discharges from the University? In addition, is it correct to assume, therefore, that University-related "industrial facilities" are not to be included in the definition noted in #13 on Page I-3 nor are they intended to be included within the LFUCG's legal authority as noted in A.1 on Page II-1?

RESPONSE 21: LFUCG is responsible for controlling all sources of stormwater pollutants that may be discharged from its MS4, including stormwater discharges into its MS4 from other MS4s. Accordingly, regardless of whether the University of Kentucky or other MS4 owners and operators obtain a separate permit, LFUCG is ultimately responsible (as is University of Kentucky) for pollutants that enter LFUCG's MS4 from the University of Kentucky. Industrial related facilities on the University of Kentucky campus would not be subject to regulation under LFUCG's permit if they are subject to control under a separate MS4 permit issued to the University of Kentucky. However, LFUCG's KPDES permit does not preclude LFUCG from regulating any source of pollutants to its MS4 under local ordinances on a more stringent basis that required under the KPDES permit.

COMMENT 22: Is it correct to assume that reference to "municipal" throughout the permit (i.e., "municipal operations" on Page II-3, #6 and "municipal construction project" in Table 6 PPMO-2, etc.) refer to LFUCG-related matters and not to other municipal entities such as the University or the Kentucky Department of Transportation?

RESPONSE 22: That is a correct assumption. "Municipal operations" relate to LFUCG's municipal operations.

COMMENT 23: If the conditions of the permit will not apply to University (i.e., refer to the first statement under Question #1), what is basis for requiring LFUCG to facilitate and participate in "Classroom Training" at the University as noted in Table 1, PE-3? It would seem that the University's own MS4 permit will entail training requirements more applicable to University storm water management.

RESPONSE 23: At the present time, the University of Kentucky does not have its own MS4 permit. Accordingly, it is appropriate for LFUCG to facilitate and participate in classroom training at the University as identified in Table 1. After the University of Kentucky obtains its own MS4 KPDES permit, the provision of Table 1 relating to classroom training at the University of Kentucky could be modified.

COMMENT 24: Is it correct to assume that the requirement in Table 3, IDDE-8, which stipulates LFUCG identify industries, businesses, and institutions that should have a Stormwater Pollution Prevention Plan does not include the University?

RESPONSE 24: See Response to Comments 22 and 23, above. Until and unless the University of Kentucky is covered under its own KPDES permit that address these activities, its activity should be fully regulated by LFUCG under LFUCG's stormwater program established under the KPDES permit. The University of Kentucky is within the jurisdictional limits of LFUCG. See also Response to Comment 20 and 21.

COMMENT 25: Is it correct to assume that the requirement in Table 4, CS-4, which stipulates LFUCG conduct monthly inspections of construction sites, does not apply to such sites at the University?

RESPONSE 25: See Response to Comment 24.

COMMENT 26: Is it correct to assume that the reference to "public property" and "publicly owned" in Table 5, PPRC and PPRC-4 respectively, does not include the University?

RESPONSE 26: The reference to "publicly owned" and "public property" in Table 5 relates to property owned by LFUCG. Stormwater controls owned by the University of Kentucky would be regulated by LFUCG under its MS4 permit as privately owned facilities within its jurisdiction.

COMMENT 27: Is it correct to assume that the requirements related to "Industrial Facilities" in Table 7, and not applicable to the University of Kentucky sites and facilities? Furthermore, is it correct to assume that the requirements related to "High Risk Commercial Facilities" as enumerated in Table 7 and elsewhere in the draft permit are also not applicable to the University?

RESPONSE 27: See the Responses to Comments 20, 21, and 22, above.

COMMENT 28: The list of parameters for the wet and dry weather monitoring should include both Fecal Streptococcus and caffeine. EPA recommends testing for both E. coli and one of the enterococci bacteria, such as Fecal Streptococcus, in order to determine whether a health risk exists from recreational water contact. Since humans are the only ones to ingest and excrete caffeine, including this parameter will provide a relatively simple way to tell whether a fecal Coliform or other substances found in waste comes from human (as opposed to wildlife or domesticated animal) it will be easier to track the source of the pollution.

RESPONSE 28: Fecal Streptococcus was on the list in earlier versions of the permit, but the Division feels that E. coli will provide better information in a timelier manner for LFUCG, so E. coli has replaced fecal streptococcus. Regarding caffeine, the Division does not feel it should be a permit requirement at this time due the exorbitant cost for sample analysis ($300 to $500 per sample). Additionally, caffeine is persistent and may not lend itself to being a good indicator of source location.

COMMENT 29: For the habitat assessments, fish sampling, and macroinvertebrate sampling, the permit should require sufficient samples from a variety of different types of aquatic habitat types (forest, agricultural, suburban/urban areas, etc). According to Appendix V of the SWQMP, fish sampling will be conducted once per year in late summer or early fall, at ten stations. Appendix V also states that "All available habitats will be sampled, including at least two riffles, two runs, and two pools". This is insufficient. The sampling should occur in different seasons, and should be sufficient to capture spring, summer, and fall populations of animals. Similarly, the macroinvertebrate sampling is insufficient. Again, sampling once per year during the spring is not enough, and sampling in one slow riffle and one fast riffle is also inadequate.

RESPONSE 29: There is no requirement under 401 KAR 5:060 § 12 (3) (b) to conduct the sampling proposed by this comment. In fact, monitoring data provided for under the regulations relates solely to the permit application. See 401 KAR 5:060 § 12 (3) (b). The proposed management program requirements of the regulation also do not mandate the establishment of a monitoring program other than for industrial facilities. To the extent the Division has discretion to require additional monitoring, including monitoring deemed appropriate for watersheds, the Division has done so in the KPDES permit, and does not believe additional monitoring is required.

COMMENT 30: The parameters listed in Appendix V of the SWQMP are different than the parameters contained in the draft permit. The lists should be the same.

RESPONSE 30: The list in Appendix V has some additional parameters which are not included in the draft permit. For example, the Division has never required LFUCG to monitor for orthophosphate, but it is something LFUCG chose to monitor on their own. The parameters in the draft permit cover the general categories of pollutants the Division is concerned with monitoring. These same general categories of pollutants also exist on the list in Appendix V. Therefore, the list in the draft permit is what is required; however, LFUCG may choose to add additional parameters as they develop their monitoring program. The Division has also chosen to replace fecal streptococcus with E. coli as outlined in Response to Comment 28.

COMMENT 31: By only requiring four samples throughout the year for as stated in the “complete calculations of seasonal pollutant loadings and event mean concentration estimates” as required by the Consent Decree will not be provided. The permit should require far more sampling sites, in different land cover types, with numerous data collection times spread throughout the seasons to capture all conditions.

RESPONSE 31: The MS4 regulations do not provide for more comprehensive sampling. Accordingly, the monitoring will remain unchanged. Monitoring is costly, and without additional regulatory basis, the Division elects not to impose more monitoring cost on communities. However, communities may increase monitoring at their discretion.

LFUCG is following the sampling prescribed in EPA’s Guidance Manual for the Preparation of Part 2 of the NPDES Permit Application for Discharges from Municipal Separate Storm Sewer Systems (1992) in order to calculate the seasonal pollutant loadings and event mean concentration estimates. This sampling is unrelated to the sampling prescribed in Part III. A. 2. of the draft permit.

COMMENT 32: The language requiring a “pilot study” for continuous monitoring should be deleted, and the final permit should require continuous throughout the county. The final permit should include continuous monitoring, and a schedule to incorporate continuous real-time monitoring at all existing gauging stations throughout the county.

RESPONSE 32: See Response to Comment 31, paragraph 1.

COMMENT 33: There does not appear to be enough coordination between the proposed LFUCG stormwater permit and the developing TMDLs for Fayette County. Specifically, the permit should include monitoring requirements that will assist in the development of TMDLs, and permit limits that will improve the water quality of the receiving waters.

RESPONSE 33: It is not LFUCG's responsibility to prepare TMDLs. While the data collected by LFUCG will be available to the Division in the preparation of TMDLs or in considering and determining stream classifications, the Division is responsible for preparing and implementing TMDLs.

COMMENT 34: The draft permit fails to adequately protect waters on the 303(d) list for Fayette County, and the final permit must contain conditions that require LFUCG to identify applicable water quality standards for each receiving waterbody, and ensure that discharges shall not cause or contribute to an exceedance of that water quality standard. The draft permit does not specifically address waters of that have TMDLs in development. However, once the TMDL is approved, the permit must address the pollutants of concern for the impaired water bodies and additional restrictions should be required.

RESPONSE 34: See prior responses relating to TMDLs.

COMMENT 35: The draft permit and its SWQMP must address how the discharge of pollutant(s) to impaired waters without an approved TMDL identified as causing the impairment will be controlled such that they do not cause or contribute to the impairment. The permit must require LFUCG to evaluate all discharges to impaired waters, and identify additional or modified BMPs in its SWQMP to ensure that discharges do not cause or contribute to the impairment. These BMPs must be implemented within an enforceable timeframe.

RESPONSE 35: The permit provisions with respect to impaired waters that do not have a TMDL are deemed sufficient with respect to requiring consideration of the effectiveness of BMPs as interim measure prior to the development of a TMDL. See also Response to Comment 8.

COMMENT 37: The commenter is pleased to see that the measurable goals from LFUCG's SWQMP have been included as part of the permit in Tables 1-9. The commenter would suggest these tables under a different heading though. The proposed permit provides reference to the tables under the Compliance Schedule Section (Part II, Page II-6, E.); however these timetables/milestones are not to be viewed as "compliance schedules" within the meaning of 40 CFR 122.47.

RESPONSE 37: The Division agrees and has revised the permit accordingly to reflect that the milestones and timetables are permit requirements and not compliance schedules.

COMMENT 38: The commenter recommends inserting a sentence under the first paragraph of Part II (Storm Water Quality Management Program) to say: "The permittee shall implement controls to reduce the discharge of pollutants to the maximum extent practicable (MEP)." Then in the last sentence, clarify the current language, "tables and requirements included in this part of the permit represent MEP" to say "the tables and requirements included in this part of the permit represent necessary components of MEP".

RESPONSE 38: The permit as written already states the requirements in the tables represent MEP. The Agency does not believe the requested clarification is necessary.

OTHER COMMENTS: Several persons submitted comments relating to LFUCG's operations or other matters that were outside the scope of the KPDES permitting program.

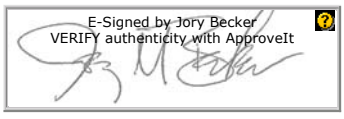
RESPONSE: The Division is not obligated to respond to such comments as they are not relevant to the KPDES permit terms.

Any person aggrieved by the issuance of a permit final decision may demand a hearing pursuant to KRS 224.10-420(2) within thirty (30) days from the date of the issuance of this letter. Any demand for a hearing on the permit shall be filed in accordance with the procedures specified in KRS 224.10-420, 224.10-440, 224.10-470, and the regulations promulgated thereto. The request for hearing should be submitted in writing to the Energy and Environment Cabinet, Office of Administrative Hearings, 35-36 Fountain Place, Frankfort, Kentucky 40601 and the Commonwealth of Kentucky, Energy and Environment Cabinet, Division of Water, 200 Fair Oaks Lane, Frankfort, Kentucky 40601. For your record keeping purposes, it is recommended that these requests be sent by certified mail. The written request must conform to the appropriate statutes referenced above.

If you have any questions regarding these responses, please contact Abigail Rains, SWP Branch, at (502) 564-8158, extension 4891.

Further information on procedures and legal matters pertaining to the hearing request may be obtained by contacting the Office of Administrative Hearings at (502) 564-7312.

Sincerely,



Sandra L. Gruzesky, Director
Division of Water

SLG:JMB:ALR